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#### CEREBROSPINAL MENINGITIS EPIDEMIC.

Cerebrospinal meningitis has become epidemic in certain localities in Arkansas, Tennessee, and the southern part of Illinois.

In Arkansas 25 cases, with 17 deaths, were reported at Lepanto, Poinsett County, during December and the first 6 days of January, and a few sporadic cases have been notified in other parts of the State.

In Tennessee there were 108 cases, with 47 deaths, reported in Dyer County to January 13. In Lake County there were 13 cases, with 9 deaths, to January 13. In Carroll County there were 4 cases during the 2 weeks ended January 11, with sporadic cases elsewhere in the State. There were 13 counties in the State in which 1 or more cases were reported during the month ended January 14.

In southern Illinois there were 11 cases, with 7 deaths, reported at Dale, in Alexander County, to January 10. Cases have also been reported at Cairo. Considerable agitation has arisen in connection with the appearance of the disease, and certain communities have established quarantine against other communities.

#### FEDERAL PUBLIC HEALTH ADMINISTRATION.

#### ITS DEVELOPMENT AND PRESENT STATUS IN THE UNITED STATES.

By J. W. KERR, Assistant Surgeon General, United States Public Health Service.

The jurisdiction of the Federal Government in public health matters extends over foreign intercourse, interstate intercourse, Federal territory, and Federal administrative affairs, including protection of the Indian tribes.

FEDERAL HEALTH ADMINISTRATION IN RELATION TO FOREIGN INTER-COURSE.

Federal health administration had for its fundamental object the prevention of the introduction of pestilential diseases. As long ago as May 27, 1796, a national law authorized the President to direct the

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revenue officers and revenue cutters to aid in the execution of quarantine, and also in the execution of the health laws of the States. As a further means of aiding foreign commerce, provisions were made in successive navigation laws to promote the health and comfort of passengers at sea, and in 1798 provision was also made for the care and treatment of persons employed in the merchant marine.

Foreign and insular quarantine.—The necessity for more and more extensive Federal supervision over international traffic was made apparent by repeated epidemics. The first permanent quarantine law, passed April 29, 1878, was a result of the widespread and severe epidemic of yellow fever during the previous year. The passage of the law of February 15, 1893, was intimately associated with the outbreak of cholera in Europe in 1892, and the quarantine act of June 19, 1906, followed the epidemic of yellow fever in the Southern States in 1905. Under the above-mentioned laws and a few minor ones, there was finally developed the national system of quarantine as it exists to-day—a system the development of which occupied approximately 100 years.

All quarantine operations are conducted under the supervision of the Federal Government, and, with two or three exceptions, all stations are conducted by Federal officers. Under the above-mentioned laws, regulations have been issued which automatically become operative on the occurrence of outbreaks of infectious diseases. The necessity for the promulgation of quarantine against a particular

foreign port is thus obviated.

Quarantine regulations prescribe the measures that shall be observed at foreign ports, at sea, and at domestic ports to prevent the introduction of infectious diseases. In foreign ports these regulations are required by law to be enforced by American consular officers, and at certain ports medical officers of the United States Public Health Service are detailed by the President for duty in American consulates to issue bills of health to steamships and to make reports on sanitary conditions and the prevalence of diseases. Among the ports where such medical officers are stationed may be mentioned Santiago, Chile; Callao, Peru; Guayaquil, Ecuador; Rio de Janeiro, Brazil; La Guaira, Venezuela; Habana, Cuba; Libau, Russia; Naples, Italy; Calcutta, India; Hongkong and Shanghai, China; and Yokohama, Japan. In order to facilitate the shipments of fruit, these officers are also on duty during certain seasons of the year in the ports of Central America and the West Indies.

Officers of vessels en route to the United States are required to observe specific regulations to preserve health, and, in the event of outbreaks of disease aboard, to take precautions to prevent its spread.

On arrival at domestic ports from abroad vessels are subject to quarantine inspection. The detailed requirements specified in quarantine regulations are not here described. Suffice it to say they include the hygienic measures to be taken with vessel, cargo, crew, and passengers to prevent infection from being carried ashore. The provisions of law relating to quarantine apply not only to the continental United States but to its island territory, and possessions.

International sanitation.—With the view to aiding commerce by the prevention of the spread of disease, the Federal Government participates in the benefit derived from international sanitary agreements. It contributes annually to the support of this work, the Public Health Service conforms to the agreements entered into, and through official channels strives to perfect them. As a means to this end, representatives of the Public Health Service are assigned as delegates of the United States to international sanitary conferences.

Sanitary supervision of immigration.—A long series of immigration laws have been enacted between the periods March 20, 1819, and February 20, 1907, their general objects from a hygienic standpoint being the improvement of the health and comfort of arriving aliens, and the development of a stronger race in the United States.

The medical inspection of immigrants is a Federal function performed by Federal officers. Some of these inspections are made abroad. In addition, the ship's manifests are required to contain certain data respecting the physical and mental condition of each alien, and reports must be made by the ship's officers of all diseases, injuries, births, or deaths occurring during the voyage.

On arrival at domestic ports, all aliens are required to undergo medical inspection, and for those suffering with disease, hospitals are maintained. The object of the medical supervision of immigration is to exclude the physically and mentally unfit, and especially the latter, who will endow their offspring with an unstable mentality, thereby bringing about the futher increase of insanity in the United States.

# FEDERAL HEALTH ADMINISTRATION IN RELATION TO INTERSTATE INTERCOURSE.

The administrative procedures in international sanitation having been established, and their further improvement assured, the great public health problems of the Nation are now of an interstate and intrastate character.

The Federal public health statutes are based upon, or are carefully in accord with that clause of the Constitution which gives the right to Congress to regulate commerce between the States. On account of the far-reaching effect of interstate intercourse on our national life, the field for public health activities on the part of the Federal Government is wide. But it must not be occupied in such manner as to usurp the power of the States or impair the efficiency of State and local public health authorities.

The first Federal statute relating to the public health provided that there should be cooperation between Federal and local authorities, and this principle has been recognized in all subsequent legislation and followed in its enforcement.

Quarantine and sanitation.—Under the quarantine act of February 15, 1893, the secretary is authorized to issue regulations for the prevention of the spread of infectious and contagious diseases from one State to another, where the regulations of the States are inadequate. These regulations may be enforced by State and local authorities, but the Federal Public Health Service is authorized to cooperate in their enforcement, and should the States fail or refuse, the President may

adopt such measures as in his judgment shall be necessary.

The powers under the above-mentioned statutes are broad, and the extent of their enforcement by the Federal Government depends on the facilities provided, the necessities in each case, and the state of public opinion in respect to the advantages of sanitation. Examples of work of this character that may be mentioned are cooperative measures for the collection and examination of rodents to prevent plague; antityphoid campaigns in urban and rural districts, and sanitary surveys of interstate and international waters in relation to the prevention of the spread of typhoid fever. There are great possibilities of extending work of this character, and it is along these lines that Federal public health work may be expected to advance.

There is necessity not only of quarantine measures to prevent the spread of communicable diseases, but sanitary measures to prevent their propagation. These include the sanitation of trains and vessels and the supplies used aboard, the regulation of conditions under which the employees of common carriers work, and the exclusion of dangerous or infected merchandise from transportation. The limitations of the Federal laws in this respect may be determined only by judicial

interpretation.

The control of epidemics.—On account of the relation of epidemics to the hygienic and commercial welfare of the country, the Federal Public Health Service may, under the provisions of the above-mentioned law, assume responsibilities in respect to their control under the direction of the Secretary of the Treasury and the President. In the event of outbreaks of cholera, yellow fever, smallpox, plague, or typhus fever in any part of the United States, the President is also authorized to cause sanitary regulations to be issued and enforced to prevent their spread, and an epidemic fund of approximately half a million dollars is appropriated annually for expenditures of the Federal Public Health Service in suppressing epidemics of these diseases.

It is under such authority that the epidemics of yellow fever in the Southern States, the outbreaks of plague in California and our island possessions, and similar outbreaks have been handled. In every instance, however, there has been thorough cooperation on the part of the Federal, State, and local authorities. The equity of our form of Government requires that the two latter shall exercise their police powers to the fullest extent, and it is on request of these authorities that the Federal Government goes to their assistance. This may be advisory in character, or may assume a more active form.

When material aid is extended, the Government's funds are required to be expended by officers of the Federal Public Health Service, and these latter are therefore placed in charge, and have the cooperation of State and local officials as well as officers of the Federal Government.

The occurrence of epidemics affords opportunity for investigations of an epidemiologic character, and advantage is taken of such situations. As an example may be mentioned the studies of plague in California and typhus fever in Mexico City.

Control of biologic products in interstate traffic.—The dangers to the public health from the exploitation of contaminated or inert biologic products impelled Congress to pass the act of July 1, 1902, regulating the propagation and sale in interstate traffic of viruses, serums, toxins, and analogous products. By its provisions, licenses are issued to establishments to engage in such traffic. Prior to the issue of licenses inspections are made of each establishment by officers of the United States Public Health Service, and examination is made of all products for which license is desired. These examinations are repeated from time to time, samples obtained in the open market being used.

Under the law, regulations are issued governing inspections of establishments, examinations of their products, the issue of licenses, and the compliance with adopted standards of purity and potency. Samples accompanying each importation of any of the biologic products in question are required to be examined before release by customs officers. By this means only is it practicable to prevent the dissemination of those biologic products which may be the means of conveying infections that give rise to disease.

Supervision of foods and drugs.—In the interest of foreign commerce, meat products prior to shipment abroad have for some years been subject to inspection, and on June 30, 1906, provision was made by Congress to prevent the use in interstate traffic, as well as foreign traffic, of meat products which are unsound, unwholesome, or unfit for human food. The enforcement of these laws devolves upon the Bureau of Animal Industry of the Department of Agriculture. All establishments affected by the law are required to be inspected; the animals slaughtered and the meat produced from

them are also subject to inspection, and regulations are prescribed for the sanitation of establishments engaged in the meat industry.

On June 30, 1906, there was also enacted by Congress the law to prevent the manufacture and sale in interstate traffic of impure foods and drugs. This law is enforced by the Secretary of Agriculture through the Bureau of Chemistry of that department.

#### COLLECTION AND COLLATION OF SANITARY INFORMATION.

The successful administration of public-health laws depends essentially upon a knowledge of the existence and current prevalence of communicable diseases, the conditions that favor their propagation and spread, and the measures that are required for their control.

Information is received by the Federal Public Health Service from American consuls throughout the world regarding dangerous diseases that exist or are epidemic in foreign ports. For this purpose the telegraph is resorted to, and in addition reports are made weekly by mail. In addition, special reports are made of matters pertaining to hygiene in the respective foreign countries.

Of even greater importance to the health of the country are the collection and collation of sanitary information and reports regarding the prevalence of diseases and the occurrence of epidemics within the States. This work on the part of the Federal Government is carried on with the voluntary cooperation of State and local authorities.

Reports of births and deaths are compiled by the Census Bureau. Sanitary information and reports of the occurrence and prevalence of disease are collected and published by the United States Public Health Service.

The extent to which notification of cases of sickness can be carried depends upon the facilities provided the Federal Public Health Service and, primarily, upon the development of local health organization within the respective States. The difficulties encountered in the enforcement of the notification of cases of disease in the United States are not unlike those encountered by sanitary authorities abroad, but in overcoming them there will be performed the most important duty in connection with the preservation of the public health.

#### INVESTIGATIONS OF MATTERS PERTAINING TO THE PUBLIC HEALTH.

Another important function of the Federal Government in relation to the public health, and perhaps the most important one, is the conduct of scientific investigations. By this means Federal administration in public-health matters is simplified and rendered more accurate; local authorities are likewise aided, and through them the people are benefited by being taught the degree of sanitary excellence that may be attained.

By an act of March 3, 1901, investigations of contagious and infectious diseases and matters pertaining to the public health were given definite status in law. Provision was made whereby laboratory investigations would be systematically carried on. Through this provision and in connection with the enforcement of the quarantine laws investigations have been made in Washington and different parts of the country. In order to comply with the law, however, this work was carried on largely through the Hygienic Laboratory.

By an act of Congress approved August 14, 1912, broader powers were conferred on the Public Health Service to "study and investigate the diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States."

There is thus abundant authority for both laboratory and field investigations by the Public Health Service. As in the past the investigations will be conducted by officers specially trained and with such cooperation as State and local health authorities may be able to render. But in order that the great needs of the country may be met, more men and more money must be provided and the Public Health Service must have the active support of individuals, professional associations, and other organizations to be benefited.

Many highly important problems await solution. Among them may be mentioned the standardization of biologic and other therapeutic products, the determination of the conditions causing pellagra and certain other diseases, the extent of the migrations of tuberculous and other patients from one locality to another, the ascertainment of the influence of artificial illuminants on health, the determination of the relation of housing and other conditions to labor efficiency, and the prescribing of reasonable standards to control stream pollution.

Requests are received daily from all parts of the country for information regarding sanitary problems and their method of handling. These requests are an excellent indication of the amount and extent of work to be performed in the immediate future. In one section of the country the question of the pollution of streams is pressing for solution; in another, it may be industrial accidents and poisoning; in another, the question of the reduction of infant morbidity; and in still another, the measures that must be taken to eradicate malaria or other communicable disease. Federal health administration involves a wise selection of the problems to be investigated and the securing of appropriations necessary to carry them on.

DISSEMINATION OF INFORMATION RELATING TO THE PUBLIC HEALTH.

Sanitary reports and statistics and the results of scientific investigations are of value only as they are made public and used. An important administrative measure, therefore, is the distribution of public health literature and the presentation of public health lectures and exhibits. By these means the Federal Public Health Service has been able to disseminate a considerable amount of sanitary

information and participate in the educational propaganda.

Among the publications issued are the Hygienic Laboratory Bulletins, bulletins of the Yellow Fever Institute, Public Health Bulletins, the weekly Public Health Reports, and miscellaneous documents. The Hygienic Laboratory Bulletins represent the results of scientific investigations conducted in the laboratory. The Public Health Bulletins are more popular in character, and are utilized to convey sanitary information to health officials and to the public generally. The weekly Public Health Reports are issued primarily for the benefit of health authorities as an aid in administration. Their utility is recognized throughout the world, and their improvement as contemplated will render them the most useful organs in health administration in this country.

The Public Health Bulletins are to be further popularized and made of interest to individuals, and they should be distributed by millions. The recognition by the Secretary of the Treasury of the value of public health education, and his deep interest in sanitary administration generally, has been responsible for a material increase recently in the amount of public health literature issued and, indeed, in the amount of scientific and practical sanitary work performed.

# HEALTH ADMINISTRATION IN RELATION TO FEDERAL TERRITORY AND FEDERAL ADMINISTRATIVE AFFAIRS.

Administrative measures taken in the interest of international and interstate sanitation, and the investigations conducted in relation thereto, have a direct or indirect value in connection with Federal administration generally. But in Federal territory and in relation to Federal administrative affairs special provision is also made. The sanitation of the military forces is performed by their respective medical corps. Sanitary inspections of Government buildings and workshops to control tuberculosis devolves on the Public Health Service, and through cooperation it performs under regulations sanitary duties for other bureaus and departments.

The extent to which this cooperation may be rendered depends on the number of officers available, since the Comptroller of the Treasury has decided in effect that officers of the Public Health Service may undertake public health duties for other bureaus providing the expenses are borne by those bureaus. Under this provision, for instance, steps are being taken for the sanitary betterment of the Indians in Alaska, and inspections have been made of mines and the mining industry with particular reference to lung diseases among miners and the measures necessary for their control.

#### ORGANIZATION OF THE FEDERAL PUBLIC HEALTH SERVICE.

The Federal Public Health Service is a bureau of the Treasury Department. Through successive acts of Congress it has undergone a process of evolution so that all of its duties are essentially of a public health character, and it is organized with a view to their performance.

The central bureau at Washington, which is presided over by the Surgeon General, has seven divisions, as follows:

- 1. Personnel and Accounts.
- 2. Foreign and Insular Quarantine and Immigration.
- 3. Domestic (Interstate) Quarantine and Sanitation.
- 4. Sanitary Reports and Statistics.
- 5. Scientific Research.
- 6. Marine Hospitals and Relief.
- 7. Miscellaneous.

Each of the six divisions first mentioned is in charge of an assistant surgeon general, who is directly responsible for administrative matters in connection with his division. In the absence of the Surgeon General the officer next in rank acts in his stead. This is the officer who has charge of the Division of Personnel and Accounts, and who has immediate supervision of the entire personnel and appropriations, and the preparation of the annual estimates therefor.

Through the Division of Foreign and Insular Quarantine and Immigration are administered all matters relating to maritime quarantine and medical inspections of aliens. In the field this division is represented by 44 quarantine and inspection stations scattered along the several coasts in the continental United States, 25 insular stations, and 37 stations located at foreign ports, and 83 immigration stations.

Through the Division of Interstate Quarantine are administered all matters relating to the control of contagious and infectious diseases in interstate traffic. In the field this division is represented by officers engaged in the inspection of Government buildings, suppression of plague outbreaks, and control of epidemics of typhoid fever and other diseases in cooperation with State and local authorities.

The Division of Sanitary Reports and Statistics handles all matters relating to the collection of morbidity reports, reports of epidemics, and of information pertaining to the geographic distribution of disease, and to climate in relation to health and disease. It prepares and publishes the weekly Public Health Reports and reprints therefrom.

In the field it is represented by officers of the service wherever stationed, and through the Department of State by American consuls at foreign ports. In the United States it depends largely on the voluntary cooperation of State and municipal authorities to furnish information and forward reports of sanitary conditions within their

respective jurisdictions.

The Division of Scientific Research administers all matters relating to investigations of contagious and infectious diseases and matters pertaining to the public health wherever made. In the field it is represented by the Hygienic Laboratory with its four divisions, the plague laboratory in San Francisco, the leprosy investigation station in Hawaii, the pellagra investigation station at Savannah, Ga., the station at Wilmington, N. C., for the investigation of the parasites of man, and by officers engaged in investigations of typhoid fever, Rocky Mountain spotted fever, poliomyelitis, etc., in different parts of the country, and sanitary surveys of navigable waters wherever conducted.

In the Division of Marine Hospitals and Relief are administered all matters connected with the care and treatment of seamen and recruiting for the several bureaus of the department. In the field it is represented by 22 marine hospitals and 121 relief stations.

In the Miscellaneous Division are handled all matters in relation to the care and distribution of publications, and to the examinations of surfmen of the Life-Saving Service, and to claims for disability in that service.

To-day the Public Health Service has a corps of approximately 450 medical officers, 50 pharmacists, and a total personnel of about 2,000.

Advisory conferences on administrative matters.—Under the Constitution and existing statutes, the Federal Public Health Service is restrained from assuming duties that properly devolve upon State and municipal authorities. But their relations are so intimate that Congress has made provision not only for cooperation, but for conferences on public health matters. In the public health law of July 1, 1902, provision is made for annual conferences between the Public Health Service and State boards and departments of health. Provision is also made for special conferences with all or a part of the State health organizations, and upon the application of not less than five State health authorities, a special conference must be called. The deliberations pertain particularly to administrative measures. In effect, there is thus provided an advisory council on administrative matters, which in its development will insure cooperation and be an arbiter on vexed sanitary questions, and in which each State is entitled to representation.

Advisory conferences on scientific matters.—In the previously mentioned law Congress also provided for an advisory board for consulta-

tion relative to investigations to be inaugurated and the methods of making them in the Hygienic Laboratory. This board consists of 9 members, 4 of whom are officers of the Government, the remaining 5 being scientists eminent in laboratory work and connected with the leading endowed institutions of the country. By this means the service is brought in touch with the great scientific laboratories, and may avail itself of advice from the highest sources.

Congress has thus made provision for councils in respect to both administrative and scientific matters. Their utilization in the highest degree is one of the most important means of development of

public-health organization and public-health work.

The foundations have been laid for further development and for the performance of a greater amount of efficient sanitary work. In order that health administration shall be effective, however, it must be adequately supported by appropriations, and it is the securing of these and their wise expenditure that constitute efficient administration.

#### HOOKWORM DISEASE.

NUMBER OF TREATMENTS AND NUMBER OF FULL DOSES OF THYMOL ADMINISTERED IN 61 HOSPITAL AND 22 HOME-CURED CASES OF HOOKWORM INFECTION.<sup>1</sup>

By Ch. Wardell Stiles, Professor of Zoology, and Geo. F. Leonard, Assistant, <sup>a</sup> Hygienic Laboratory, United States Public Health Service,

In this paper the term "cured" means that a week or more after treatment a microscopic reexamination of the patient gave negative results.

In practical hookworm-eradication work the question is frequently asked, "How long does it take to cure a case?" This question has a practical basis from the standpoint of the patients, for many of them refuse to take a second course of medication. From the standpoint of the person giving the treatment the question has a double significance: (1) The greater the number of patients who can be cured in a single treatment the more rapidly will a certain—and a very important-part of the work be finished. (2) Many patients are, however, very ignorant and can not be relied upon-as experience shows-to carry out directions; accordingly, the clinician has his choice between (a) assuming a certain amount of risk by giving a larger dose, and (b) giving repeated treatments with smaller doses, thus giving to himself and to the patient a greater amount of trouble but at the same time increasing the factor of safety for his patient; running the risk, however, that his patient will not return for more than one treatment, and therefore possibly leaving one more uncured case at large to infect other people.

<sup>&</sup>lt;sup>1</sup> Read at the XVth International Congress on Hygiene and Demography, Washington, September, 1912.
<sup>2</sup> With North Carolina State Board of Health since June 1, 1912.

There are known to us not less than 11 deaths in this country, due, so far as it has been possible to determine, either to following thymol with castor oil instead of with salts, or to carelessness in respect to following out the usually adopted procedure. But whatever the explanation of these deaths may be, the fact remains that many patients whom we treat are exceedingly ignorant and illiterate and are unreliable when it comes to following out instructions.

It is therefore more than an academic matter to determine how small a dose can cure or does cure a case of hookworm infection, and

the extent of the infection in question.

The present paper contains two series of cases—one series treated

in the hospital, the other at home.

In a certain cotton-mill village in eastern North Carolina, 267 inhabitants (140 males, 127 females) out of a population of 700 volunteered for microscopic examination. Thus 38.1 per cent of the population volunteered.

Of these 267 (white) inhabitants, 140 persons (or 52.4 per cent)

were found infected with hookworms.

Of 140 males, 79 persons (or 56.4 per cent) and of 127 females, 61 persons (or 48 per cent) showed hookworm infection.

Most of the patients mentioned in this paper came from the cotton

mill in question

Number of treatments of females.—A number of the females were treated at their homes, with a mill nurse to visit them during the day of medication. In some instances it was impossible to obtain specimens to determine whether or not the treatment was complete in results, but the following data may be reported:

Total number of females examined, 127; found infected, 61 persons, or 48 per cent; treated, 52; cured, 19; data incomplete in 33; not

treated, 9.

Treated 1 or more times, 52; cured in 1 treatment, 12; not cured in 1 treatment, 21; data incomplete in 19.

Treated 2 or more times, 21; cured in 2 treatments, 7; not cured in 2 treatments, 5; data incomplete in 9.

Treated 3 or more times, 5; cured in 3 treatments, ?; not cured in 3 treatments, 1; data incomplete in 4.

Treated 4 times, 1; data incomplete.

Number of treatments of males.—The following tabulation gives the male cases treated at the hospital and also [in brackets] male cases treated at home.

Treated 1 or more times, 94 [+9]; cured in 1 treatment, 45 [+3]; not cured in 1 treatment, 15 [+1]; data incomplete in 34 [+5].

Treated 2 or more times, 29 [+1]; cured in 2 treatments, 6; not cured in 2 treatments, 14 [+1]; data incomplete in 9.

Treated 3 or more times, 14 [+1]; cured in 3 treatments, 6; not cured in 3 treatments, 6 [+1]; data incomplete in 2.

Treated 4 or more times, 6 [+1]; cured in 4 treatments, 1; not cured in 4 treatments, 5 [1].

Treated 5 or more times, 5 [+1]; cured in 5 treatments, 1; not cured in 5 treatments, 3 [+1]; data incomplete in 1.

Treated 6 or more times, 3 [+1]; cured in 6 treatments, 0; not cured in 6 treatments, 2 [+1]; data incomplete in 1.

Treated 7 or more times, 2 [+1]; cured in 7 treatments, 2; not cured in 7 treatments, [1].

Comparing the male hospital cases with the male home cases and the female (home) cases, it is clear that a greater proportion (45 in 94 equal 47.8 per cent) of cures on 1 treatment are known for the hospital than for the home cases (15 in 61 equal 24.5 per cent). That this result is not due entirely to incomplete data is rendered probable by two facts: (1) That there is a smaller number of known incomplete cures in 1 treatment (15 in 94 equal 15.9 per cent) for the hospital than for the home cases (22 in 61 equal 36 per cent), and (2) in leaving thymol at the home the tendency in all cases is to leave smaller doses so as to increase the factor of safety to the patient, in view of the risks necessarily connected with leaving the drug among people who can not be relied upon to carry out directions, even when printed directions are given. In other words, a larger dose of thymol given under hospital conditions involves less of a risk to a patient in a given physical condition than it does to the same patient at home, and we are fully justified in giving larger doses in hospital practice.

Total size of dose used.—Tabulation of the cured cases in question, according to the total amount of thymol used per age of patient gives the following results:

Tabulation of 19 cured female cases, treated at home.

Age.	No.	Basic maxi- mum single dose of thymol.	First dose.	Second dose,	Total dose of thymol.	Portion of single basic maxi- mum dose for age.
		Grains.	Grains.	Grains.	Grains.	
7½ years	1	15	5	5	10	0.66
12 years	1	30	10		10	. 33
12½ years	1	30	121		12.5	. 41
13 years	1	30	15		15	. 50
15 years	2	45	20		20	. 44
16 years	1.	45	121	123	25	.55
Do	1	45	30	30	60	1.33
17 years	1	45	25		25	. 55
18 years	1	45	40		40	. 88
Do	1	45	35	35	70	1.55
19 years	1	45	35		35	.77
20 years	1	60	35		35	. 58
21 years	1	60	40	40	80	1.33
22 years	1	60	50		50	. 83
23 years	1	60	40	40	80	1.33
25 years	1	60	45	45	90	1, 50
26 years	1	60	30		30	. 50
45 years	1	60	30	*******	30	.50
Total	19	825			717.5	.87

From the foregoing tabulation it is seen that of 19 complete cures in home treatment, 12 had only one treatment and 7 had two treatments each; 14 were cured with less than a full dose of thymol, and 5 had above one full dose, but not over one and one-half full doses.

Illustrating the possibilities of accident, even when the patients are cautioned as to details, it may be stated that a few moments after one of the children took her thymol, some kind neighbor learning that the child had had no breakfast attempted to give to the patient some wine. It was only by a mere chance that the good intentions of the kind neighbor were frustrated, and thereby that probable accident was avoided.

Although it was not feasible to draw a comparison in these cases between the size of the dose and the number of worms passed, the table shows that some cases may be cured at home in one course of treatment with even as low as one-third of the present standard dose.

Tabulation of three cured male cases treated at home.

Age.	Num- ber.	Basic maximum single dose of thymol.	First dose.	Total thymol given.	Portion of single maximum dose given.
5 years. 6 years. 7 years.	1 1 1	Grains. 15 15 15	Grains. 3 5 71	Grains. 3 5 7 1	0. 2 . 33 . 5
Total	3	45	15]	151	.34

In case of these children it was distinctly unwise to give the maximum dose for the age group, and all three were cured with half a dose or less. In one other case, seven home doses (small) failed to effect a complete cure.

It was not feasible to count the worms in these cases.

Tabulation of 61 cured hospital male cases, arranged according to age and dose.

Age.	No.	Basic maxi- mum dose.	First dose.	Second dose.	Third dose.	Fourth dose.	Fifth dose.	Sixth dose.	Sev- enth dose.	Total thymol.	Portion of single maxi- mum dose given.	Worms col- lected.
		Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.		
5 years	1	15	7.5							7.5	0.5	1
Do	1	15	10	10						20	1.33	14
6 years	1	15	7.5	10	10					27.5	1.83	62
7 years	1	15	15							15	1	2
Do	1	15	15							15	1	5
8 years	1	15	10							10	. 66	42
9 years	1	15	20							20	1.33	2
Do	1	15	20							20	1.33	3
Do	1	15	20							20	1.33	7
10 years	1	30	15							15	.5	- 0
Do	1	30	20							20	. 66	1
Do	1	30	20							20	. 66	19
Do	1	30	20	20	20					60	2	474
Do	1	30	12	15	12.5	15	20			74.5	2.48	295

Tabulation of 61 cured hospital male cases, arranged according to age and dose—Contd.

Age.	No.	Basic maxi- mum dose.	First dose.	Second dose.	Third dose.	Fourth dose.	Fifth dose.	Sixth dose.	Sev- enth dose.	Total thymol.	Portion of single maxi- mum dose given.	Worms col- lected.
		Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.		
11 years		30	15	******			******			15	0.5	
Do		30	25							25	. 83	2
Do		30	25						******	25	. 83	4
12 years		30	25							25	. 83	21
Do		30	25							25	. 83	(
Do	1	30	30							30	1	1
Do	1	30	10	10	20					40	1.33	113
Do		30	20	20						40	1.33	68
Do	1	30	20	20	20	25	25	25	25	160	5, 33	500
13 years	1	30	20							20	, 66	138
Do	1	30	25							25	. 83	1
Do	1	30	25							25	. 83	j
Do	1	30	20	25						45	1.5	111
Do	i.	30	20	20	30					70	2.33	170
14 years	i	30	20	-						20	. 66	150
Do	î	30	25	*******						25	. 83	100
Do		30	25							25	. 83	
Do	i	30	30	*******	*******		*******			30	1	4
Do	i	30	30							30	i	2
Do	1	30	20	20	25					65	2, 16	72
15 years	i	45	25							50	1.11	1, 142
16 years	1	45	20	20	******	*******	******	******		20	. 11	
Do	î	45	30			*******			******	30		73
Do	i	45	20	25	36	******	******	******	******	75	, fifi	206
Do	i	45	10	15	25	15	25	30	30		2.33	538
		45	25	25	25			0.0	400	150	3, 33	633
17 years	1			25	25	25				100	2. 22	2,277
18 years		45 45	45		******	*******	******			45	1	(?)
Do	1		50	50		******				100	2.22	92
19 years	1	45	45			******				45	1	37
20 years	1	60	45			*******				45	. 75	11
Do	1	60	45							45	. 75	72
Do	1	60	50	*******		******				50	. 83	. 7
21 years	1	60	60	*******		******				60	1	95
Do	1	60	60							60	1	143
23 years	1	60	60			*******				60	1	167
24 years	1	60	60							60	1	24
25 years	1	60	45					******	******	45	.75	44
26 years	1	60	42.5							42.5	.70	6
27 years	1	60	60	60				******		120	2	1
29 years	1	60	60							60	1	80
30 years	1	60	60							60	1	8
31 years	1	60	60							60	1	17
33 years	1	60	50							50	. 83	8
36 years	1	60	50							50	. 83	58
37 years	1	60	60							60	1	97
38 years	1	60	60							60	î	28
60 years	î	45	50							50	1.11	6
Total.	61	2,355								2,722	1.15	12,980

From the foregoing table it will be seen that of 61 cured hospital cases in this series 45 received 1 treatment, 6 received 2, 6 received 3, 1 received 4, 1 received 5, and 2 received 7 courses of treatment. If, however, we base the comparison on the standard maximal dose for the age group in question, the following results are obtained: 4 cases were cured with a total of 0.5 of the maximal dose or less; 21 with between 0.5 and the maximal dose, 16 with the maximal dose, 10 with a total dose of between 1 and 2 maximal doses; 8 cases with a total dose of from 2 to 2.48 maximal doses; 1 case was cured with 3.33 maximal doses; and 1 with 5.33 maximal doses; a total of 61 were cured with a total dose averaging 1.15 maximal dose.

Comparing now the 61 hospital with the 22 home cases it is seen that while, from a standpoint of caution, a smaller number of home cases were cured on 1 treatment, the cures in general were effected with smaller sized doses (average 0.84) than those used in the hos-

pital cases (average 1.15).

From the hospital cases it is seen that in the cure of 58 cases 2,637 grains of thymol were used and that from the stools of these patients 12,980 worms were collected. Thus, on an average 1 grain of thymol expelled at least 4.7 worms. This conclusion is not, however, of any significance, for in 1 case 60 grains expelled only 1 worm, while in one course of treatment 25 grains expelled 2,246 worms (an average of 89.8 worms per grain of thymol).

#### CONCLUSIONS.

The general conclusions from the foregoing study seem to be:

(1) The present more or less frequently expressed desire to increase the dose of thymol considerably in excess of the present generally accepted maximal doses is not entirely unnatural, in view of the fact that so many patients fail to follow out the treatment until all the worms are expelled, and therefore a considerable number of persons continue to distribute the infection.

(2) Many cases of hookworm infection are cured by less than one

maximal dose for the age group in question.

(3) When the thymol treatment is properly carried out, namely, when it is given under proper precautions, and the margin of safety to the patient is properly safeguarded, the present maximal doses seem

to be entirely safe.

(4) The fact can not, however, be ignored that many of our patients are ignorant and illiterate, and can not be relied upon to carry out directions, and if the thymol dose in home treatment is in general increased this must be done with a distinct risk that involves a totally unnecessary danger to a large number of patients who may be completely cured with less than the present maximal dose.

(5) In view of the fact that not less than 11 deaths have occurred in the United States because of following thymol with castor oil instead of with salts or because of carelessness on the part of the patient or his family, we do not consider it wise to have a general increase in the size of the dose of thymol in the home-treatment cases. We entirely concur with the field men who in clinic practice cut the doses down below the present accepted maximal dosage.

(6) With an increase of sanitary privies, or with a repetition of smaller doses, the same eventual curative result will be obtained as would follow with an increased single dose of thymol; and while the former plan will take a longer time, it involves less risk and the improved sanitation will give additional results in other diseases.

### PREVALENCE OF DISEASE.

#### IN CERTAIN STATES AND CITIES.

#### SMALLPOX.

#### State Reports.

Places,	Cases.	Deaths.	Places.	Cases.	Deaths.
Alabama (Nov. 1-30): Counties— Autaugua	1		Maryland (Dec. 1-31): Counties— Allegany	7 2	
Hale	4 2		Total	9	
Pickens Tuscaloosa	9		Michigan (Dec. 1-31): Counties—		
Total	22	1	Clinton	3 5 6	
Arizona (Dec. 1-31): County—Mariposa	35		Keweenaw Lapeer Monroe	1 1 2	
Connecticut (Dec. 4-31): County—Putnam	3		Oakland Saginaw	1 2	
Maine (Dec. 1-31): Counties—			St. Clair	63	
Cumberland Oxford Penobscot	3 1 9		Total	87	
Sagadahoc	4 29	·····i	New Jersey (Dec. 1-31): County—Passaic		None.
Total	46	1	Grand total	202	2

#### Maryland-Allegany County.

The Secretary of the Maryland State Board of Health reported by telegraph January 15 the occurrence of 5 additional cases of smallpox in Allegany County. These 5 cases were located at a point just across the river from Piedmont, W. Va.

#### Wisconsin Report for December, 1912.

			Vac	Vaccination history of cases.				
Place.	Number of new cases reported during month.		Number vacci- nated within 7 years preceding attack.	Number last vac- cinated more than 7 years preceding attack.	vecci	Vaccination history not obtained or un- certain.		
Barron County	1							
Brown County	24				20	1		
Buffalo County	1							
Clark County	13				12	1		
Columbia County	1							
Dunn County	8				6			
Forest County	1				********			
Grant County	1				1			
efferson County	1							
La Crosse County	36		1	14	21			
Marathon County	25		1			2		
Milwaukee County	14	*******		2	4			
Oconto County	2							
Rusk County	2			**********	**********			
st. Croix County	0			1	1			
Vernon County	3				*******			
Waushara County Winnebago County	1							
Total	141		2	17	65	5		

#### City Reports for Week Ended Dec. 28, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	4 1 3 2 23 8 3 9 1	1	New Orleans, La Nisgara Falls, N. Y Oakland, Cal Omaha, Nebr Rutland, Vt Saginaw, Mich Spokane, Wash Springfield, Ohio Toledo, Ohio Zanesville, Ohio	2 1 1 3 2 1 1 1 3 10	

#### TYPHOID FEVER.

#### Alabama Report for November, 1912.

Place.	New cases reported during month.	Place.	New cases reported during month.
Autauga County. Escambia County Jackson County Jefferson County. Lauderdale County.	1 4 25	Mobile County	67
Lee County	1	Total	.56

#### Wisconsin Report for December, 1912.

Place.	New cases reported during month.	Place.	New cases reported during month,
Ashland County Dane County Dodge County Douglas County Fond du Lae County Kenosha County La Crosse County	2 3 1 5 3	Milwaukee County Shawano County Vernon County Washburn County Washington County Winnebago County	14
Marinette County	4	Total	5

#### CEREBROSPINAL MENINGITIS.

#### Alabama Report for November, 1912.

The Alabama State Board of Health reports that 1 case of cerebrospinal meningitis was notified in Jefferson County during the month of November, 1912.

#### Illinois.

Senior Surg. Gassaway of the Public Health Service, on duty at Cairo, Ill., reported by telegraph January 10 that 11 cases of cerebrospinal meningitis, with 7 deaths, had been reported at Gale, a small village 26 miles from Cairo; that some communities have established quarantine against Cairo and also against the localities in which the disease has been reported in Tennessee and Kentucky; that the town of Thebes has a cordon of 8 guards, and that January 10 one case of meningitis was reported at Cairo in a boy 11 years of age.

#### Tennessee.

The secretary of the Tennessee State Board of Health reported by telegraph January 11 that there were two new cases of cerebrospinal meningitis in Dyer County, no new cases in Lake County, four cases in Carroll County during the last two weeks, and sporadic cases elsewhere in the State.

Surg. R. H. von Ezdorf reported January 14, by telegraph from Nashville, that incomplete reports of cerebrospinal meningitis in Dyer County to January 13 gave 108 cases and 47 deaths. In Lake County there had been 13 cases and 9 deaths in the 2 weeks ended January 14. Thirty of the cases in Dyer County were confirmed microscopically during the 3 weeks ended January 14. A large number of the cases had occurred in negroes scattered widely over the county. Active measures for the control of the outbreak had been begun. There were 13 counties in the State where 1 or more cases of cerebrospinal meningitis had been reported during the month ended January 14.

#### Wisconsin Report for December, 1912.

The Wisconsin State Board of Health reports that during the month of December, 1912, new cases of cerebrospinal meningitis were reported as follows: Dane County, 1; Kenosha County, 1; Milwaukee County, 1; Sheboygan County, 2.

#### Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

New Orleans, La	
St. Louis, Mo	
-	Pawtucket, R. I.           Philadelphia, Pa.           St. Louis, Mo

#### POLIOMYELITIS (INFANTILE PARALYSIS).

#### Wisconsin Report for December, 1912.

The State Board of Health of Wisconsin reports that during the month of December, 1912, new cases of poliomyelitis (infantile paralysis) were reported as follows: Columbia County, 3 cases; Dodge County, 1 case; Jefferson County, 1 case; Rock County, 1 case; Walworth County, 1 case; Winnebago County, 1 case.

#### Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Cumberland, Md Los Angeles, Cal New York, N. Y		1	Philadelphia, Pa Plainfield, N. J	1	1

#### ERYSIPELAS.

#### Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Beaver Falls, Pa	1 1 7 6 1	1	Nanticoke, Pa. Newark, N. J. New York, N. Y. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo.	27 13 9 18	

PLAGUE.

#### Rats Collected and Examined for Plague.

Places.	Week ended-	Found dead.	Total collected.	Exam- ined.	Found infected.
California: Cities— Berkeley Oakland. San Francisco. Washington:	Doc. 28, 1912 do	4 15 11	141 573 1, 194	104 437 1,008	
City— Seattle	Dec. 21, 1912 Dec. 28, 1912		1,083 849	$1,021 \\ 762$	

### California-Squirrels Collected and Examined for Plague Infection.

During the week ended December 28, 1912, there were examined for plague infection 124 ground squirrels from Contra Costa County, 110 from San Joaquin County, 36 from Santa Clara County, and 51 from Stanislaus County. No plague-infected squirrel was found.

PNEUMONIA.

Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Cal		1	Lynn, Mass		2
Auburn, N. Y	3	1	Manchester, N. H		3
Aurora, Ill		1	Montgomery, Ala		1
Baltimore, Md		22	Nashville, Tenn		8
Bayonne, N. J		2	Newark, N. J		17
Berkeley, Cal		2	New Bedford, Mass	7	
Binghamton, N. Y		8	Newburyport, Mass		1
Boston, Mass,		32	New Castle, Pa	3	
Bridgeport, Conn		9	New Orleans, La		
Brookline, Mass		1	Newton, Mass		2
Cambridge, Mass		8	New York, N. Y. Niagara Falls, N. Y.		141
Cambridge, Ohio		1	Niagara Falls, N. Y		
Chelsea, Mass		3	North Adams, Mass		2
Chicago, Ill		135	Oakland, Cal		
Chicopee, Mass		2	Oklahoma City, Okla		1
Cincinnati, Ohio		17	Omaha, Nebr		
Cleveland, Ohio		28	Pasadena, Cal		4
Columbus, Ga		3	Passaic, N. J.		
Columbus, Ind		ĭ	Pawtucket, R. I		8
Concord, N. H		î	Philadelphia, Pa		57
Dayton, Ohio		4	Pittsburgh, Pa		36
Duluth, Minn	5	5	Pittsfield, Mass		5
Dunkirk, N. Y	1		Portsmouth, Va		2
Elizabeth, N. J.		3	Reading, Pa	1	3
El Paso, Tex		3	Richmond, Va		6
Evansville, Ind		1	St. Joseph, Mo		
Everett, Mass		2	San Diego, Cal	1	1
Fall River, Mass		10	Saratoga Springs, N. Y	2	
Galesburg, Ill		2	Schenectady, N. Y.		
Grand Rapids, Mich		2	South Bethlehem, Pa		9
Harrisburg, Pa		2	South Omaha, Nebr		9
Hartford, Conn		4	Spokane, Wash		i
Haverhill, Mass		2	Springfield, Mass		
Houston, Tex		-	Taunton, Mass		
Jersey City, N. J		13	Toledo, Ohio.		
Kalamazoo, Mich		10	Waltham, Mass		1
		1	Washington, D. C.		14
La Crosse, Wis La Fayette, Ind		1	Wilkes-Barre, Pa		2
		1			
Lancaster, Pa	2	10	Wilkinsburg, Pa		
os Angeles, Cal		19	Wilmington, N. C		
Lowell, Mass		5	Yonkers, N. Y		0
Lynchburg, Ky		1	Zanesville, Ohio		1

#### TETANUS.

#### Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

During the week ended December 28, 1912, tetanus was reported by cities as follows: Baltimore, Md., 1 death; Los Angeles, Cal., 1 death; New York, N. Y., 1 death; Philadelphia, Pa., 1 case with 1 death; Richmond, Va., 1 death.

#### SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

#### Alabama Report for November, 1912.

The Alabama State Board of Health reports that during November, 1912, there were reported in the State 32 cases of scarlet fever and 88 cases of diphtheria.

#### Alaska.

Acting Asst. Surg. H. C. Story reported by telegraph January 11 that 35 cases of measles had occurred at Saxman, an Indian village 3 miles south of Ketchikan, Alaska, and that there was no competent health authority to take charge.

#### Wisconsin Report for December, 1912.

The Wisconsin State board of health reports that during December, 1912, there were reported in the State 252 cases of scarlet fever, 211 cases of measles, and 179 cases of diphtheria.

#### Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912.

	Population United	Total deaths		hthe- ia.	Me	asles.		arlet ver.		ercu- sis.
Cities.	States Census 1910.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md	558, 485	209	36	4	27		19	2	25	24
Boston, Mass	670,585	224	37	6	150	9	28	1 1	42	14
Chicago, Ill	2, 185, 283	750	229	26	254	6	262	22	128	80
Cleveland, Ohio	560, 663	169	65	5	36		24	1	23	15
New York, N. Y	4,766,883	1,403	338	26	298	7	283	15	332	147
Philadelphia, Pa	1,549,008	470	92	10	174	3	109	2	83	51
Pittsburgh, Pa	533,905	196	44	4	218	4	27			13
St. Louis, Mo	687,029	290	61	5	119	6	27	1	37	27
300,000 to 500,000 inhabitants:	,		-	-			-	-	-	-
Cincinnati, Ohio	364, 463	146	16	2	383	5	32	2	26	19
Los Angeles, Cal	319, 198	136	5		2		8	1	17	
Milwaukee, Wis	373,857	119	27	4	5			4	14	12
Newark, N. J.	347, 469	105	30		8		29		23	5
New Orleans, La	339,075	142	33	4	18		4		19	19
Washington, D. C	331,069	126	19		21		19		13	12
200,000 to 300,000 inhabitants:		-			1		-			
Jersey City, N. J.	267,779	76		1				1		5
Providence, R. I	224, 326	87	19	2	2		13		4	4
100,000 to 200,000 inhabitants:									1	
Bridgeport, Conn	102,054	38	6	1			11		5	1
Cambridge, Mass	104, 839	34	8	1	9		3		6	6
Dayton, Ohio	116,577	45	9	1			5			4
Fall River, Mass	119, 295	34	2	2			8		3	
Grand Rapids, Mich	112,571	35	5		1		2			1
Lowell, Mass	106, 294	50	3	1	3		32	2	3	2
Nashville, Tenn	110, 364	43	2 2				4		2	4
Oakland, Cal	150, 174	47	2	1			3		2	i

# Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912—Continued.

	Population, United	Total deaths		hthe- ia.	Mea	asles.		rlet rer.		ercu sis.
Cities.	States Census 1910.	nsus all	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
00,000 to 200,00 inhabitants-										
Continued. Omaha, Nebr	124,096	26	1							
Richmond, Va	127,628	57	4		76		5		2	
Richmond, Va	104, 402				1				1	
Toledo, Ohio	168, 497	57	14	3	17		8 4	2	7	
Worcester, Mass 0,000 to 100,000 inhabitants:	145,986	53					4			
Attoona, Pa. Bayonne, N. J. Brockton, Mass. Camden, N. J. Duluth, Minn. Elizabeth, N. J. Evansville, Ind.	52, 127	11	7				3	1		
Bayonne, N. J	55, 545	12	6		6					
Brockton, Mass	56,878	2	2				1			
Camden, N. J	94,538		10						1	****
Fligaboth N T	78, 466 73, 409	25 13	1 3		7					
Evansville, Ind	69,647	21	5	1			4			
Harrisburg, Pa Hartford, Conn	64, 186	24	1	1	1		2		6	ĺ
Hartford, Conn	98, 915	37	12		6		10			
Hoboken, N. J	70, 324	*******	8		2					****
Houston, Tex	78,800 82,331	35	5		1					
Hoboken, N. J. Houston, Tex. Kansas City, Kans. Lawrence, Mass.	85, 892		9				1			
Lynn, Mass	89.336	19	1		21		1			
Manchester, N. H	70,063	33	5	1			1			
New Bedford, Mass	96,652	24	1		1					
Oklahoma City, Okla	64, 205	11	1							
Passaie, N. J	54,773 51,622	21 8								
Oklahoma City, Okla Passaic, N. J. Pawtucket, R. I. Peoria, Ill.	66, 950	32	1				2			
Reading, Pa	96,071	29	5	1	11		1			
Saginaw, Mich	50, 510	12	3		48					
St. Joseph, Mo	77, 403	28	1						1	
Schenectady, N. Y	72,826	16	4		3					
South Bend, Ind	53,684 88,926	15 30	6	1 2	22				1	
Trenton N I	96, 815	31	3							
Wilkes-Barre, Pa	67,105	12	8		2		4			
Peoria, III  Reading, Pa	79,803	24	9	1	1		2			
Auburn, N. Y	34,668 29,807	11	1		9	1		1		
Berkeley Cal	40, 434	6 9								
Berkeley, Cal Binghamton, N. Y Brookline, Mass	48, 443	26	1						2	
Brookline, Mass	27,792	7	2		1		1			
Chattanooga, Tenn	44,604		2				1		1	
Chelsea, Mass	32, 452	15	7		6		1			
Chicopee, Mass	25, 401 27, 871	7 3								
Davenport Lows	43.1028	0	2				2			
East Orange, N. J. Elmira, N. Y. El Pasco, Tex. Everett, Mass.	34,371		2		2					
Elmira, N. Y	37,176	9	5				2 3			
El Pasco, Tex	39, 279	20	1				3			
Fitchburg Mass	33,484 37,826	4 7	i			1	î			
Fitchburg, Mass	44,115	18		1	9	1	3		1	
Kalamazoo, Mich Knoxville, Tenn La Crosse, Wis Lancaster, Pa	39, 437	11	2		2		1		1	
Knoxville, Tenn	36,346	10	1							
La Crosse, Wis	30, 417	12	1				1			
Lynchburg, Va	47, 227 29, 494	4	1	*****	4	*****			2	
Montgomery, Ala	38,136	17	2		ī		1	1	1	
Newcastle, Pa	36, 280		2	*****			1			
Newton, Mass	39,806	14		i	1				3	1
Montgomery, Ala Newcastle, Pa. Newton, Mass. Niagara Falls, N. Y	30, 445	10	1		44		2		3	
Norristown, Pa Pasadena, Cal	27,875 30,291	7 9	1		1	*****	2	*****	1	
Pittsfield, Mass	32, 121	13	1				1		2	
Portsmouth, Va	33, 190	13	î		1		*****			
Racine, Wis	38,002	10								
Roanoke, Va	34,874	15	3		1		3			
Salem, Mass	43,697	******							3	
San Diego, Cal	39,578 $26,259$	4 8	*****						3	
Springfield, Ohio	26, 259 46, 921		11	1	1	*****	8			
Superior, Wis	40.384	5			î					
Warmton Mann	34, 259	15	1	1	1			1	3	1
Waltham, Mass	27,834	4	3				3		2	

# Cases and Deaths Reported by Cities for Week Ended Dec. 28, 1912—Continued.

aut.	Population United	deaths		hthe- ia.	Mea	isles.	Scarlet fever.		Tub	ercu sis.
Cities.	Census	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
5.000 to 50,000 inhabitants—Con.										
Wilmington, N. C	25,748	10	2							
York, Pa	44,750		2 2		21		1			
Zanesville, Ohio	28,026	12	5				2			
ess than 25,000 inhabitants:							_			
Alameda, Cal	23,833	6							1	
Ann Arbor, Mich	14,817	10							1	
Beaver Falls, Pa	12, 191									
Biddeford, Me	17,079	2								
Braddock, Pa	17.759		1		7		2			
Cambridge, Ohio	11.327	3								
Clinton, Mass	13.075	3	1		87					
Columbus, Ga	20,554	10								
Columbus, Ind.	20,001	3	3	*****						
Concord, N. H.	21, 497	6								
Cumberland, Md.	21,839	3	******							***
Dunkirk, N. Y.	21,000	2	2	1	1			*****		
Galesburg, Ill.	22,089	13	ī							
Harrison, N. J.	14,489	6							0	
Kearny, N. J.	18,659	5							1	
La Fayette, Ind	20.081	7	1							
Logansport, Ind	20,001	8	1							***
Marinette, Wis	14.610	2				*****				
Massillon, Ohio	23,830	2				*****				
Medford, Mass		*******					-	- 1		***
Melrose, Mass	23, 150	1								
Meliuse, Mass	15,715 24,190	27								
Moline, Ill		9								
Montclair, N. J. Nanticoke, Pa.	21,450 18,857	5					2	*****		
Newburyport, Mass	19, 249	4			1					
North Adams, Mass		10	2				1			
North Adams, Mass	22,019	12							1	
Ottumwa, Iowa	19,431									
Plainfield, N. J.	23,012	8								****
Pottstown, Pa	23,550 15,559	******								****
Pottstown, Pa	15,559	4								
Rutland, Vt						*****	1			
Saratoga Springs, N. Y									2	
South Bethlehem, Pa					1				1	
Steelton, Pa	14,476									
Warren, Pa	11,080	-								
Wilkinsburg, Pa	18, 294								1	
Woburn, Mass	18,594	6	*****				*****			

#### IN INSULAR POSSESSIONS.

#### HAWAII.

#### Examination of Rodents for Plague Infection.

During the week ended December 21, 1912, 124 rats were examined at Honolulu for plague infection. No plague-infected rat was found.

During the week ended December 14, 1912, 1,749 rats and mongoose were examined at Honokaa; and during the same period 879 rats and mongoose were examined at Hilo. None were found to be plague infected.

The last case of human plague occurred at Kukuihaele, Hawaii, December 16, 1912. The last plague-infected rat was found on Honokaa plantation December 23, 1912.

#### PORTO RICO.

#### Plague Situation.

Passed Asst. Surg. Creel reports:

RATS EXAMINED DEC, 21 TO 28, 1912.

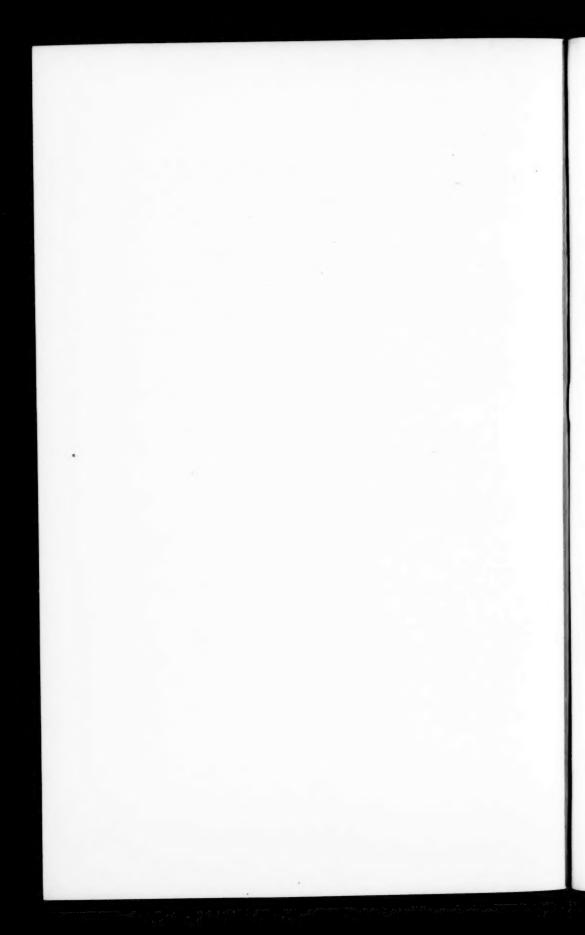
Places.	Rats ex- amined.	Rats found infected.
All Porto Rico	1,136 97	3.1
Puerta de Tierra. Santurce.	10 74	

<sup>1</sup> Found at Caguas.

#### RATS EXAMINED DEC. 28, 1912, TO JAN. 4, 1913.

Places.	Rats ex- amined.	Rats found infected.
All Porto Rico	1,077	
San Juan	68	
Puerta de Tierra	20	
Santurce	107	******

The last case of plague in man occurred in San Juan Sept. 12, 1912; the last plague-infected rat was found at Caguas Dec. 19, 1912.



### FOREIGN REPORTS.

#### ABYSSINIA.

#### Adis Ababa-Measles and Smallpox.

Consul General Love reported December 14, 1912, that measles and smallpox were very prevalent at Adis Ababa.

#### BRAZIL.

#### Pernambuco-Plague.

Consul Bachillers reports: During the two weeks ended November 30, 1912, 2 deaths from plague were reported at Pernambuco.

#### CHINA.

#### Amoy-Plague and Smallpox.

The American consul reported January 16 the presence of plague and smallpox in Amoy.

#### CUBA.

#### Transmissible Diseases, Month of November, 1912.

Disease.	New cases.	Deaths.	Remain- ing under treat- ment.
Tuberculosis	238	200	2,972 338 138
Malaria. Typhoid fever	75 70	8 23	47
Diphtheria. Scarlet fever. Measles.	113 43 13	16 2 0	27 12 13
Varicella. Tetanus in the new born	5 10	11	3

#### INDIA.

#### Bombay-Cholera

Consul Horton reports December 11: During the past three days 20 cases of cholera with 15 deaths have been reported in Bombay. The outbreak is attributed to the arrival in the city of persons from outlying districts where fairs are being held.

### CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

#### Reports Received During Week Ended Jan. 17, 1913.

#### CHOLERA.

Places.	Date,	Cases.	Deaths.	Remarks.
Bulgaria:				
Eski Saghra	Dec. 9	2		
Sofia	Nov. 21-Dec. 16	6	1	
Dutch East Indies:		0	1	
Borneo-Samarinda	Oct. 9	1		
Java—	Oct. 5		********	
Madioen	Sept. 22-Oct. 5	27	24	
Megalang	Oct. 7-12	9	6	
Samarang	July 19-Oct. 17	436	352	
Sumatra-Jambi	Sept. 18-24	1		
India:				
Bombay	Dec. 1-14	50	29	
Calcutta	Nov. 24-30		34	
Cochin	Nov. 3-9	1	1	
Madras	Dec. 1-14 Nov. 11-16	14	10	
Negapatam	Nov. 11-16	9	9	
Rangoon	Nov. 1-30		2	
Indo-China—Saigon	Aug. 20-Oct. 27	42	38	
Japan-Taiwan	Nov. 24-30	8	10	
Canada Catalana ata Cina anno	Nov. 24–30 Dec. 1–7 Nov. 17–23	11	10	
Straits Settlements—Singapore.	Nov. 17-23	26	2 26	From Marona Charalta and Males
Zanzibar	Nov. 22-30	26	26	From Mwera, Chwaka, and Moke toni districts. Chwaka distric Oct. 4-13, 101 cases not include in previous reports.
	PLA	GUE.		
			2	
Brazil: Pernambuco	Nov. 16-30		2	
Pernambuco	Nov. 16-30 Nov. 24-30	····i	1	
Pernambuco	Nov. 16-30 Nov. 24-30 Dec. 9-15	····i		
Pernambuco	Nov. 16-30 Nov. 24-30 Dec. 9-15	1 46	1	
Pernambueo. Rio de Janeiro. China: Shanghai. Dutch East Indies: Java— Kediri. Madioen	Nov. 16-30	1 46 8	1 1 44 8	
Pernambuco Rio de Janeiro China: Shanghai Dutch East Indies: Java— Kediri Madioen Pasoeroean	Nov. 16-30	46 8 90	44 8 85	
Pernambuco           Río de Janeiro           China: Shanghai           Dutch East Indies:           Java—           Kediri           Madioen           Pasoeroean           Surabaya	Nov. 16-30	1 46 8	1 1 44 8	
Pernambuco Rio de Janeiro China: Shanghai Dutch East Indies: Java Kediri Madioen Pasoeroean Surabaya India:	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 do do	46 8 90 2	1 1 44 8 85 2	
Pernambuco Rio de Janeiro China: Shanghai Dutch East Indies: Java Kediri Madioen Pasoeroean Surabaya India:	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 do do	46 8 90 2	1 1 44 8 85 2 11	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java .  Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 do do do Dec. 1-14 Nov. 1-30	1 46 8 90 2 12	1 1 44 8 85 2 11 8	
Pernambuco  Rio de Janeiro  China: Shanghai  Dutch East Indies:  Java  Kediri  Madioen  Pasoeroean  Surabaya  India:	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oet. 13-26 do do do Dec. 1-14 Nov. 1-30 Oet. 1-31	1 46 8 90 2 12	1 1 44 8 85 2 11 8 65	
Pernambuco.  Rio de Janeiro.  China: Shanghai.  Dutch East Indies:  Java—  Kediri.  Madioen.  Pasoeroean.  Surabaya  India:  Bombay  Calcutta.  Rangoon.	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12	1 1 44 8 85 2 11 8 65 3	Total Oot 27-Nov 30: Coope
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java .  Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12	1 1 44 8 85 2 11 8 65	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java—  Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta .  Rangoon .  Provinces .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	46 8 90 2 12	1 1 44 8 85 2 11 8 65 3	Total Oct. 27-Nov 30; Ceses 12,333; deaths, 9,908.
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2	1 1 44 8 8 85 2 11 8 65 3	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 31 4,475	1 1 44 8 85 2 11 8 65 3	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 4,475 733	1 1 44 8 85 2 11 8 65 3	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 31 4,475	1 1 1 44 8 8 85 2 2 11 8 65 3 356 520 520	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 31 4,475 733 30	1 1 44 8 85 2 11 8 65 3 3	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 12 4,475 733 30 473 2,270 495	1 44 8 85 2 11 8 65 3 3 14 3,356 520 30 367 1,857	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	46 8 90 2 12 67 2 31 4,475 733 30 44,275 733 32,270 495 34	1 1 1 444 8 8 85 2 2 111 8 65 3 3 3 67 1,857 371 34	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 4,475 733 30 473 2,270 495 34 242	1 444 8 85 2 111 8 65 3 3 367 1,857 1,857 341 193	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 14,475 733 30 473 2,270 495 34 242 975	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India:  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 Oct. 13-26 dodododododododo.	1 46 8 90 2 12 67 2 4,475 733 30 473 2,270 495 34 34 242 975 613	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Pernambuco. Rio de Janeiro. China: Shanghai. Dutch East Indies: Java—  Kediri. Madioen. Pasoeroean. Surabaya. India: Bombay. Calcutta. Rangoon.  Provinces.  Delhi. Bombay. Madras. Bengal. Bihar and Orissa. United Provinces. Punjab. Burna. Central Provinces. Mysore. Hyderabad. Central India	Nov. 16-30 Nov. 24-30 Dec. 9-15 dodododododododo.	1 46 8 90 2 2 12 67 733 30 473 2,270 495 34 242 975 613 57	14 8 85 2 11 8 65 3 14 3,356 520 30 367 1,857 371 34 193 701 523 47	
Pernambuco. Rio de Janeiro. China: Shanghai. Dutch East Indies: Java—  Kediri. Madioen. Pasoeroean. Surabaya. India: Bombay. Calcutta. Rangoon.  Provinces.  Delhi. Bombay. Madras. Bengal. Bihar and Orissa. United Provinces. Punjab. Burna. Central Provinces. Mysore. Hyderabad. Central India	Nov. 16-30 Nov. 24-30 Dec. 9-15 dodododododododo.	46 8 90 2 12 67 2 31 4,475 733 30 4775 733 32 2,270 495 344 242 975 613 57 1,905	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Pernambuco. Rio de Janeiro. China: Shanghai. Dutch East Indies: Java—  Kediri. Madioen. Pasoeroean. Surabaya. India: Bombay. Calcutta. Rangoon.  Provinces.  Delhi. Bombay. Madras. Bengal. Bihar and Orissa. United Provinces. Punjab. Burna. Central Provinces. Mysore. Hyderabad. Central India	Nov. 16-30 Nov. 24-30 Dec. 9-15 dodododododododo.	1 46 8 90 2 12 67 73 30 4,475 733 30 495 34 24,20 495 61 31 15 67 75 75 75 75 75 75 75 75 75 7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total Oct. 27-Nov 30: Cases 12,333; deaths, 9,908.
Pernambuco .  Rio de Janeiro .  China: Shanghai .  Dutch East Indies:  Java — Kediri .  Madioen .  Pasoeroean .  Surabaya .  India: .  Bombay .  Calcutta .  Rangoon .  Provinces .  Delhi .	Nov. 16-30 Nov. 24-30 Dec. 9-15 dodododododododo.	46 8 90 2 12 67 2 31 4,475 733 30 4775 733 32 2,270 495 344 242 975 613 57 1,905	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Austria-Hungary: Galicia Brazil:	Dec. 1-7	1	
Pernambuco			65
China: Shanghai			28
Canada: Montreal			
Ottawa	Jan. 4	1	

### CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

#### Reports Received During Week Ended Jan. 17, 1913-Continued.

#### SMALLPOX-Continued.

	Cases.	Deaths.	Remarks.
gypt: Alexandria Dec. 9-16	1		
rance: Paris Dec. 15-21		1	
ndia:			
Bombay Dec. 1-14	6	3	
		0	
Karachi Dec. 1-7			
Madras Dec. 1-14		2	
Rangoon Oct. 1-31		3	
Do Nov. 1-30			
ndo-China: Saigon Aug. 20-Oct. 20	) 2	2	
fexico:		1	
Mexico Nov. 17-30		9	
Salina Cruz Nov. 17-23	1		
eru: Salaverry Dec. 4-11	1		
ortugal: Lisbon Dec. 15-21			
tussia: St. Petersburg Nov. 24-Dec. 14	4 22	3	
iberia:			
Vladivostok Oct. 28-Nov. 13	3 2	1	
Valencia. Dec. 15-21.		4	
witzerland: Basel Dec. 8-21		*******	
urkey in Asia: Beirut Dec. 8-14		2	

#### Reports Received from Dec. 27, 1912, to Jan. 10, 1913.

#### CHOLERA.

Dutch East Indies: Borneo—Pontrank	Oct 6	1		
Java-	Oct. 6	1	*******	
Batavia	Nov. 9-23	32	21	One case among Europeans.
Madioen	Sept. 15-21		8	One case among Emojeans.
Pasoeroean Residency	Sept. 10-21		1	
Sumatra—Jambi	Sept. 4-17			
India:	Sept. 4-17	99	14	
Bombay	Nov. 17-30	12	9	
Calcutta			45	
Cochin	Oct 19-25	5	5	
Madras	Nov. 24-30	6		
Japan				July 10-Dec. 7: Cases, 2,647.
Aita Ken	Dec 9	1		July 10-1-cc. 1. Cuscs, 2,-11.
Chiba Ken			*********	
Fukushima Ken				
Hioga Ken	Nov 27-Dec 5	21		
Hiroshima Ken	Nov 23	1	*********	
Ibaraki Ken	Dec 6			
Kanagawa Ken		-		Total Nov. 23-Dec. 6: Cases, 33.
Yokohama		15		
1 Okoliailia	101.21 Dec. 1	10		vessels.
Kochi Ken	Nov. 28-Dec. 4	3		V Coocio.
Nagasaki Ken	Nov 23-Dec 1	7		
Osaka Fu	Nov. 23-Dec. 1	1.4		
Saga Ken	do	5	********	
Shidzuoka Ken	Dec 3	1	*********	
Taiwan (Formosa)	Dec. 3		*********	Total Nov. 3-23: Cases, 48.
Taiwan (Formosa)				deaths 42.
Tokyo Fu	Nov. 22-Dec 6	68		deaths va.
Tokyo				Oct. 2-Dec. 7: Cases, 273; and in
10ky0				vicinity, 342.
Wakamatsu Ken	Nov. 26	1		vicinity, our
Russia—Odessa				Nov. 18-20, one case from s. s.
Avussia Odessa	**************			Bosnian from Constantinople.
				Confined in the quarantine
				barracks.
Siam-Bangkok	Oct 12-Nor 0		3	Dattacks.
Turkey in Asia			0	Total, Nov. 17-23: Cases, 160;
lutkey in Asia				deaths, 218.
Adana-Adana	Nov. 17-23	9	1	details, ato.
Aleppo—Alexandretta	do	2	i	
Angora	do		24	
Brusa		6	16	
Castomoni		2		
Diarbekir			2	

### CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

#### Reports Received from Dec. 27, 1912, to Jan. 10, 1913-Continued.

#### CHOLERA-Continued.

	CHOLERA	-contin	ued.	
Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia—Continued.  Hedjaz— Jidda.  Mekka Ismidt Mosul.	Nov. 17-23do	395 111 3	393 172 1	Among returning pilgrims.
Smyrna Turkey in Europe—Constanti- nople.	Dec. 3-9	540	229	Total since Nov. 5: Cases, 1,455 deaths, 687.
ZanžibarAt sea		81	80	From Mwera, Chwaka, and Moke toni. Nov. 18-20, one fatal case on s. 8 Bosnian, en route from Con stantinople to Odessa.
	YELLOW	FEVE	R.	,
Senegal: Dakar	Dec. 7			Present.
	PLA	GUE.		
			ı	1
Brazil: Rio de Janeiro	Nov. 3-23 Oct. 1-31 Nov. 18-24	6 12	12 1	Free Nov. 18,
Kediri	Oct. 6-12do	29 8	29 8	
Pasoeroean Residency Surabaya	Oct. 6.	42	44	
India: Bombay	Nov. 17-30 Nov. 9-23 Nov. 19-23	10	9	
Karachi New Caledonia: Numea	Oct. 29	2 2	2	Sept. 17-Oct. 17, 8 cases, with deaths.
Peru: Departments—				No.
Arequipa— Mollendo Callao—			4	
Callao Lambayeque Philippine Islands;	Sept. 1-7do		•••••••	Present. Do.
Manila	Nov. 10-16	5	4	
	SMAL	LPOX		
Abyssinia: Adis Ababa Algeria:	Nov. 24-30			Present.
Departments— Algiers Constantine	Oct. 1-31do	11	••••••	
Oran	do	118		
Austria-Hungary: Galicia Brazil:	Nov. 10-16			
Para	Nov. 3-23 Dec. 1-21		1	
Toronto	The state of the s			
Montreal	Dec. 15-21dodo	1		Imported.
Chile Punta Arenas	Oct. 31	2		Imported.

### CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

Reports Received from Dec. 27, 1912, to Jan. 10, 1913—Continued.

#### SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China: Chungking	Nov. 3-16			Imported.
Hongkong	Nov. 24-30	1	1	
Nanking	Dec. 7 Nov. 18-Dec. 1	2		Do.
Shanghai	Nov. 18-Dec. 1 Nov. 17-23	2	15	Deaths among natives.
Dutch East Indies:	NOV. 11-20	*******		
Java—Batavia	Nov. 9-23	10	1	
Egypt: Cairo	Nov. 12-Dec. 2	1	î	
France:	21011 12 2 20 21111		-	
Marseille	Nov. 1-30		1	
Paris	Dec. 1-7	2		
Germany				Total: Nov. 24-30, 5 cases not
				included in report, page 2231,
Gibit	D 0 12			vol. xxvii; Dec. 1-14, 8 cases.
Gibraltar	Dec. 9-15 Nov. 17-30	3	********	
India: Bombay	Nov. 17-30	9	*******	
Aguascalientes	Dec. 9-29		3	
Chihuahua.	de		1	
San Luis Potosi	Sept. 15-21			
Peru:	DOJA: 40 B4		***********	
Callao	Sept. 1-14			Present.
Lima	do			Do.
Mollendo	Nov. 24-Dec. 7			
Portugal: Lisbon	Dec. 1-14	14		
Russia:				
Odessa	Nov. 17-23	2		
Warsaw	Sept. 22-Oct. 5	5		
Spain:	Dec 1 01		40	
Barcelona	Dec. 1-21 Nov. 1-30		46	
Valencia	Nov. 14-Dec. 14			
Switzerland: Basel	Nov. 14-20		*********	
Turkey in Europe: Constanti-	Dec. 1-14		31	
nople.	***************************************		94	
Zanzibar	Nov. 8-14		1	



# SANITARY LEGISLATION.

# STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

#### NEW YORK.

Tuberculosis—County hospitals for care of patients affected with—Admission and care of patients (chap. 239, acts of 1912, adopted Apr. 9, 1912).

SEC. 1. Subdivision 5 of section 48 (see p. 70, Public Health Manual) and section 49-a (see p. 73, Public Health Manual) of chapter 16 of the laws of 1909, entitled "An act in relation to counties constituting chapter 11 of the consolidated laws," as added by chapter 341 of the laws of 1909, are hereby amended to read respectively as follows:

"5. Shall receive into the hospital, under the general direction of the board of managers, in the order of application, any person found to be suffering from tuberculosis in any form who is entitled to admission thereto under the provisions of this chapter; and shall also receive persons from other counties as hereinafter provided. Said superintendent shall cause to be kept proper accounts and records of the admission of all patients, their name, age, sex, color, martial condition, residence, occupation, and place of last employment.

"Sec. 49-a. Maintenance of patients in the county in which hospital is situated .-Wherever a patient has been admitted to said hospital from the county in which the hospital is situated, the superintendent shall cause such inquiry to be made as he may deem necessary, as to his circumstances, and of the relatives of such patient legally liable for his support. If he find that such patient or said relatives are able to pay for his care and treatment in whole or in part, an order shall be made directing such patient or said relatives to pay to the treasurer of such hospital for the support of such patient a specified sum per week, in proportion to their financial ability, but such sum shall not exceed the actual per capita cost of maintenance. The superintendent shall have the same power and authority to collect such sum from the estate of the patient, or his relatives legally liable for his support, as is possessed by an overseer of the poor in like circumstances. If the superintendent find that such patient or said relatives are not able to pay, either in whole or in part, for his care and treatment in such hospital, the same shall become a charge upon the county. When any indigent patient shall have been admitted to any such hospital as a resident of the county in which the hospital is located, and it shall be found that such patient has not acquired a settlement within such county under the provisions of the poor law, the superintendent of such hospital shall collect from the county, city, or town in which such patient has a settlement, the cost of his maintenance in such hospital, or may in his discretion return such patient to the locality in which he has a settlement.

# Sewer connections—Contracts with other municipalities (chap. 259, an act adopted Apr. 4, 1912).

SEC. 276. Contracts with other municipalities, sewer districts, etc.—The board of sewer commissioners may contract for the connection of the sewers thereof with the sewers of another village, or of a town, or city, or of a sewer district established under the

10

provisions of article 11 of the town law or of chapter 348 of the laws of 1901 and the laws supplementary thereto or amendatory thereof; or jointly with such other village or a town or city or sewer district established as aforesaid may construct, maintain, operate, or use sewers, outlets, or disposal works; or may contract with any such other village, or a town, or city, or sewer district established as aforesaid for the right to construct and maintain through any such other village, town, or city, or sewer district established as aforesaid an outlet sewer, including the right to acquire real property for such sewer outlet, which thereupon may be acquired either at private sale or by condemnation as authorized by this act. But no such contract shall be made unless a proposition therefor be adopted, stating the maximum expense.

# Surgical operations for the prevention of procreation—To be performed upon certain criminals, the incurable insane, etc. (chap. 445, acts of 1912).

Sec. 1. Article 18 of chapter 49 of the laws of 1909, entitled "An act in relation to the public health, constituting chapter 45 of the consolidated laws," as renumbered article 19 by section 5 of chapter 128 of the laws of 1911, is hereby made article 20 thereof, and sections 350 and 351 of such chapter are hereby renumbered sections 360 and 361, respectively.

Sec. 2. Such chapter is hereby amended by inserting therein a new article, to be

article 19 thereof, to read as follows:

#### ART. 19 .- Operations for the prevention of procreation.

Sec.

350. Board of examiners; compensation and expenses.

351. General powers and duties of the board; persons to be operated upon.

352. Appointment of counsel to persons to be operated upon.

353. Unauthorized and illegal operations.

SEC. 350. Board of examiners; compensation and expenses.—Immediately after the passage of this act, the governor shall appoint one surgeon, one neurologist, and one practitioner of medicine, each with at least 10 years' experience in the actual practice of his profession, for a term of five years, to be known as the board of examiners of feeble-minded, criminals, and other defectives, which board is hereby created. The compensation of the members of such board shall be \$10 per diem for each day actually engaged in the performance of the duties of the board, and their actual and necessary traveling expenses. Any vacancies occurring in said board shall be filled by appointment of the governor for the unexpired term.

SEC. 351. General powers and duties of the board; persons to be operated upon.—It shall be the duty of the said board to examine into the mental and physical condition and the record and family history of the feeble-minded, epileptic, criminal, and other defective inmates confined in the several State hospitals for the insane, State prisons, reformatories, and charitable and penal institutions in the State, and if in the judgment of the majority of said board procreation by any such person would produce children with an inherited tendency to crime, insanity, feeble-mindedness, idiocy or imbecility and there is no probability that the condition of any such person so examined will improve to such an extent as to render procreation by any such person advisable, or if the physical or mental condition of any such person will be substantially improved thereby, then said board shall appoint one of its members to perform such operation for the prevention of procreation as shall be decided by said board to be most effective.

The criminals who shall come within the operation of this law shall be those who have been convicted of the crime of rape or of such succession of offenses against the criminal law as in the opinion of the board shall be deemed to be sufficient evidence of confirmed criminal tendencies.

SEC. 352. Appointment of counsel to person to be operated upon.—The board of examiners shall apply to any judge of the supreme court or county judge of the county

in which said person is confined for the appointment of counsel to represent the person to be examined. Said counsel to act at a hearing before the judge and in any subsequent proceedings, and no order made by said board shall become effective until five days after it shall have been filed with the clerk of the court and a copy shall have been served upon the counsel appointed to represent the person examined, and proof of service of said copy of the order to be filed with the clerk of the court. All orders made under the provisions of this act shall be subject to review by the supreme court or any justice thereof, and said court may upon appeal from any order grant a stay, which shall be effective until such appeal shall have been decided. The judge of the court appointing any counsel under this act may fix the compensation to be paid him. No surgeon performing an operation under the provisions of this act shall be held to account therefor. The record taken upon the examination of every such inmate signed by the said board of examiners shall be preserved by the institution where said inmate is confined, and one year after the performance of the operation the superintendent or other administrative officer of the institution wherein such inmate is confined shall report to the board of examiners the condition of the inmate and the effect of such operation upon such inmate, and a copy of the report shall be filed with the record of the examination.

Sec. 353. Unauthorized and illegal operations.—Except as authorized by this act, every person who shall perform, encourage, assist in, or otherwise permit the performance of the operation for the purpose of destroying the power to procreate the human species or any person who shall knowingly permit such operation to be performed upon such person unless the same shall be a medical necessity, shall be guilty of a misdemeanor.

SEC. 3. This act shall take effect immediately.

# Appropriations for year ending September 30, 1913 (chap. 546, acts of 1912, adopted April 19, 1912).

#### DEPARTMENT OF HEALTH.

DEPARTMENT OF HEALTH.	
For the salaries of the—	
Commissioner of health	\$6,000.00
Deputy commisioner of health	4,000.00
Secretary	4,000.00
Chief clerk and director of the division of vital statistics	3,000.00
Ninth grade, one employee	2, 100.00
Sixth grade, one employee	1, 200.00
Third grade, one employee	600.00
Second grade, one employee	480.00
For the actual and necessary traveling expenses of the commissioner in the performance of his official duties, \$1,000, or so much thereof as may	
be necessary	1,000.00
For the actual and necessary traveling expenses of the deputy commissioner in the performance of his official duties, \$500, or so much thereof	
as may be necessary	500, 00
For actual and necessary traveling expenses of subordinates of the department of health in the performance of their official duties pur- suant to the written direction of the commissioner, \$7,500, or so much	
thereof as may be necessary	7, 500. 00
For services and expenses of experts and stenographers in examinations and investigations, and for the expenses of the annual conference of	
health officers, \$9,000, or so much thereof as may be necessary	9,000.00
For furniture, books, blanks, binding, printing, messages and other necessary and incidental office expenses, \$10,000, or so much thereof	
as may be necessary	10, 000. 00

For postage, and transportation of letters, official documents, and other matter sent by express or freight, including boxes or covering for same,	
\$5,000, or so much thereof as may be necessary	\$5,000.00
Division of sanitary engineering:	\$0,000.00
For salaries of the—	
Consulting engineer.	4, 500.00
Assistant consulting engineer.	3, 000. 00
Two assistant sanitary engineers	4, 000. 00
Sixth grade, one employee	1, 200. 00
Fourth grade, one employee	720.00
For the purchase of instruments, maps, and for necessary and incidental	120.00
office expenses, \$1,000, or so much thereof as may be necessary	1,000.00
Division of vital statistics:	1, 000. 00
Eighth grade, two employees.	3, 600, 00
Seventh grade, one employee	1, 500.00
Sixth grade, one employee	1, 200. 00
Fifth grade, four employees	3, 600. 00
Third grade, three employees	1, 800. 00
Laborer	720.00
Division of publicity and education:	120.00
For salary of the director	1, 200.00
Division of communicable diseases:	1, 200.00
For salary of the medical expert on contagious diseases	2, 400, 00
Sixth grade, one employee	1, 200. 00
Fifth grade, one employee	900.00
For the suppression, control, and prevention of epidemics of infectious and	300.00
contagious diseases and tuberculosis exhibits in the several municipali-	
ties of the State, \$30,000, or so much thereof as may be necessary	30, 000. 00
Division of cold storage inspection:	30, 000. 00
For enforcing the provisions of chapter 335 of the laws of 1911,	
relative to cold storage, the following sums are hereby appro-	
priated—	
For salaries of inspectors, and necessary legal services and travel-	
ing expenses, \$30,000, or so much thereof as may be necessary	30, 000. 00
For clerks, stenographers, printing of books and forms, and office	
expenses, \$4,500, or so much thereof as may be necessary  Antitoxin laboratory:	4, 500. 00
For actual and necessary expenditures for the manufacture and	
standardization of tetanus, streptococcus and diphtheria antitoxin,	
for the proper distribution of the same in antiseptic tubes, and for	
further investigations of serum therapy in tuberculosis, typhoid	
fever and kindred diseases, \$17,000, or so much there of as may be	
necessary	17, 000, 00
Hygienic laboratory:	11,000.00
For actual and necessary expenses of equipment and maintenance of	
of the State hygienic laboratory and for the services of the Bender	
laboratory and elsewhere, \$14,000, or so much thereof as may be	
necessary	14,000.00
STATE INSTITUTE FOR THE STUDY OF MALIGNANT DISEASES.	,
For the State Institute for the Study of Malignant Diseases at Buffalo, for the equipment and maintenance of laboratory and hospital, includ-	
ing salaries, \$60,000, or so much thereof as may be necessary	60, 000. 00
and some so, 400,000, or so much thereof as may be necessary	50, 000. 00

## LUNACY COMMISSION.

For salaries of the—	
Medical commissioner	\$7, 500, 00
Legal commissioner.	5, 000. 00
Lay commissioner	5, 000. 00
Medical inspector	4, 500. 00
Secretary	5, 000. 00
Auditor	4, 000. 00
Eleventh grade, two employees.	5, 000. 00
Ninth grade, one employee	2, 000. 00
Seventh grade, four employees	6, 400, 00
Sixth grade, one employee	1,000.00
Fourth grade, one employee	700.00
Second grade, two employees	960, 00
For temporary clerical and expert services, \$2,500, or so much thereof	
as may be necessary	2, 500. 00
For traveling and incidental expenses of the three commissioners in the	
performance of their official duties, \$1,200 each, \$3,600	3, 600. 00
For the actual and necessary traveling expenses of the medical inspector,	
in the performance of his official duties, \$1,000, or so much thereof as	
may be necessary	1,000.00
For the deportation of alien and nonresident lunatics to other countries	
and States; and for the transfer of patients from one hospital to another,	
\$25,000, or so much thereof as may be necessary	25, 000, 00
For compensation and actual and necessary traveling expenses of special	
agents in the performance of their official duties, \$10,000, or so much	
thereof as may be necessary	10,000.00
For furniture, books, blanks, printing, stationery, messages, postage	
and transportation of letters, official documents and other matter sent	
by express or freight, including boxes or covering for same, and other	
necessary and incidental office expenses, \$8,500, or so much thereof	
as may be necessary	8, 500. 00
For the maintenance of the psychiatric institute, under the direction of	
the State commission in lunacy, as provided by article 7 of chapter 32	
of the laws of 1909, being the insanity law, \$30,000, or so much thereof	00 000 00
as may be necessary	30, 000. 00
Board of alienists:	
For the salaries of the members of the board of alienists appointed	
under section 19 of chapter 32 of the laws of 1909, being the insan-	15 000 00
ity law, \$15,000.	15, 000. 00
For the actual and necessary expenses of the members of said board, in the performance of their official duties, \$600, or so much thereof	
as may be necessary.	600. 00
For the services of interpreters, clerk, and stenographer, \$6,000, or so	000.00
much thereof as may be necessary	6, 000. 00
For office expenses, including rent, telephone, stationery, and post-	0, 000. 00
age, \$3,000, or so much thereof as may be necessary	3,000.00
Bureau of hospital treasurer:	5, 000. 00
For salary of the treasurer, State hospitals	4, 500, 00
Ninth grade, one employee	2, 000. 00
Eighth grade, two employees	3, 400. 00
Seventh grade, one employee.	1, 500. 00
Sixth grade, two employees.	2, 200. 00
First grade, one employee.	360.00
Branch and Ambrol And	

Inspectors of buildings and supplies:	
For salary of the—	<b>84 000 00</b>
Inspector of buildings and engineering Inspector of supplies	\$4,000.00 4,000.00
For the necessary and actual expenses of the inspectors in the per-	4, 000.00
formance of their official duties, \$2,000, or so much thereof as may	
be necessary	2,000.00
Hospitals:	2,000.00
Binghamton State Hospital; for maintenance	437, 070. 50
Buffalo State Hospital; for maintenance	377, 084. 00
Central Islip State Hospital; for maintenance	732, 198. 00
Gowanda State Homeopathic Hospital, for maintenance	207, 936. 95
Hudson River State Hospital, for maintenance	568, 491.00
Kings Park State Hospital, for maintenance	643, 069. 00
Long Island State Hospital, for maintenance	206, 470. 50
Manhattan State Hospital, for maintenance	754, 616. 86
Middletown State Homeopathic Hospital, for maintenance	375, 108.00
Mohansic State Hospital, for maintenace	69, 090. 00
Rochester State Hospital, for maintenance	295, 587. 50
St. Lawrence State Hospital, for maintenance	388, 407. 50
Utica State Hospital, for maintenace	318, 349. 36
Willard State Hospital, for maintenance	431, 412. 20
DEPARTMENT OF HEALTH.	
For the printing of marriage licenses and record books for town, city, and county clerks, and express charges for distribution of same, ordered pursuant to chapter 742, laws of 1907, and article 3, chapter 19, laws of 1909, being the domestic-relations law, \$2,000, or so much thereof as may be necessary.	\$2,000.00
For the control and prevention of ophthalmia neonatorum and the pre-	42,000.00
vention of blindness, \$2,500, or so much thereof as may be necessary	2, 500. 00
For the purpose of paying the expenses of an exhibition of New York State work in hygiene, public health, sanitation, and vital statistics, at the fifteenth international congress at Washington, D. C., in September, 1912, \$10,000, or so much thereof as may be necessary, payable by the	
treasurer on the warrant of the comptroller	10, 000. 00
of 1910, for the actual and necessary traveling expenses of the commissioner of health, are hereby reappropriated for additional or temporary services in said office	1, 590. 49
STATE INSTITUTE FOR THE STUDY OF MALIGNANT DISEASES.	
For the State Institute for the Study of Malignant Diseases at Buffalo, for remodeling present stable and animal house into service building and heating and lighting plant, and for the erection of new animal house, for masonry, carpentry, and plumbing in connection with the	

same, installation of boilers and motor generator plant, erection of chimney, for wiring and electric light fixtures, for furnishing seven service bedrooms, for concrete and wire fence across south line of lot,	
\$16,400, or so much thereof as may be necessary	\$16, 400, 00
laws of 1911, \$20,000, or so much thereof as may be necessary	20, 000. 0 <b>0</b>
LUNACY COMMISSION.	
One hundred and twenty-five dollars, being the unexpended balance of an appropriation made by chapter 512 of the laws of 1910, for graded employees in the bureau of the State hospitals treasurer during the year beginning October 1, 1910, is hereby reappropriated for deficiency in the salary of one clerk of the eleventh grade from May 1 to Sept. 30, 1912.	125, 00
Nine hundred and sixty-two dollars and seventy cents, being the unex- pended balance of an appropriation made by chapter 512 of the laws of 1910, for graded employees in the office of the State commission in	
lunacy, is hereby reappropriated for temporary clerical and expert	
services.  For deficiency in the appropriation for furniture, books, blanks, printing, stationery, messages, postage and transportation of letters, official docustrated of the property of the control o	962, 70
ments and other matter sent by express or freight, including boxes or covering for same, and other necessary and incidental office expenses for the State commission in lunacy, \$2,500, or so much thereof as may	
be necessary	2, 500. 00
necessary	250.00
For the payment to Harry W. Mack, of New York City, in full for services rendered by him by direction of the State commission of lunacy in negotiating the acquisition by the State of parcels of land in Westchester County for a hospital site for the insane and now comprising the lands of the Mohansic State Hospital, to be paid upon the approval of	
the State commission of lunacy and the audit of the comptroller, \$2,500	
or so much thereof as may be necessary	2, 500.00
To the State commission in lunacy for deficiency to Dr. Ira O. Tracy, for services rendered as first assistant physician at the Long Island State Hospital, between the 1st day of July, 1895, and the 1st day of Decem-	
ber, 1903, the sum of \$5,000, or so much thereof as may be necessary, to to be paid by the State treasurer, upon the warrant of the comptroller drawn upon the requisition of the State commission in lunacy upon its determination made as hereinafter provided. The State commission in lunacy is hereby authorized and empowered to hear and determine the claim of said Dr. Ira O. Tracy for services and compensation while acting as first assistant physician of such hospital, because of the residence of his family at a place other than such hospital, in lieu of the quarters and supplies furnished by hospitals to first physicians, pursuant to the	
provisions of section 49 of the insanity law, and upon making their determination thereon the commission shall make a requisition as aforesaid for the amount found to be due, if any	5, 000. 00

37 of chapter 58 of the laws of 1909, being the State finance law, is hereby appropriated and made available to supplement the appropriations provided by chapter 810 of the laws of 1911, for the support of the State hospitals	\$600, 000. 00
Seventeen thousand four hundred forty-seven dollars and seventy-one	
cents, being the unexpended balance of the appropriation made by chapter 811 of the laws of 1911, and representing a portion of the	
board moneys and miscellaneous receipts of the State hospitals dur-	
ing the year ending September 30, 1911, and paid into the State	
treasury, is hereby reappropriated and made available to supply	
deficiencies in the maintenance account of the State hospitals during	
the year ending September 30, 1912	17, 447. 71
For reimbursing State hospital stewards and other bonded employees	
for expenses incurred by them while acting in position of trust in pay-	
ment of premiums on bonds required by the State comptroller, or the	
commission during the year ending September 30, 1912, \$750, or so	
much thereof as may be necessary	750.00
Ten thousand dollars, being the unexpended balance of the appropria-	
tion made by chapter 507 of the laws of 1910, for miscellaneous repairs,	
improvements, emergencies and equipment, is hereby reappropriated	10 000 00
for the same purpose	10, 000. 00
To reimburse the commission for advances made from the fund of \$250,000	
contained in chapter 507 of the laws of 1910, and a similar fund of	
\$200,000, made by chapter 819 of the laws of 1911, for miscellaneous	
repairs, improvements, emergencies, and equipment at the State hos-	
pitals for extraordinary fire protection as recommended by the gov-	07 000 00
ernor and by the State fire marshal	37, 000. 00

## Public water supplies—Protection of, from contamination (chap. \$95, Acts of 1911, adopted July 18, 1911).

Sec. 70. Rules and regulations of department.—The State department of health may make rules and regulations for the protection from contamination of any or all public supplies of potable waters and their sources within the State, and the commissioner of water supply, gas and electricity of the city of New York may make such rules and regulations subject to the approval of the State department of health for the protection from contamination of any or all public supplies of potable waters and their sources within the State where the same constitute a part of the source of the public water supply of said city. If any such rule or regulation relates to a temporary source or act of contamination, any person violating such rule or regulation shall be liable to prosecution for misdemeanor for every such violation, and on conviction shall be punished by a fine not exceeding \$200, or imprisonment not exceeding one year, or both. If any such rule or regulation relates to a permanent source or act of contamination, said department may impose penalties for the violation thereof or the noncompliance therewith, not exceeding \$200 for every such violation or noncompliance. Every such rule or regulation shall be published at least once in each week for six consecutive weeks in at least one newspaper of the county where the waters to which it relates are located. The cost of such publication shall be paid by the corporation or municipality benefited by the protection of the water supply to which the rule or regulation published relates. The affidavit of the printer, publisher, or proprietor of the newspaper in which such rule or regulation is published may be filed, with the rule or regulation published, in the county clerk's office of such county, and such affidavit and rule and regulation shall be conclusive evidence of such publication, and of all the facts therein stated in all courts and places.

SEC. 71. Inspection of water supply.—The officer or board having by law the management and control of the potable water supply of any municipality, and in the city of New York, the commissioner of water supply, gas, and electricity, or the corporation furnishing such supply, may make such inspection of the sources of such water supply as such officer, board, or corporation deems advisable, and to ascertain whether the rules or regulations of the State department and of the commissioner of water supply, gas, and electricity of the city of New York are complied with; and shall make such regular or special inspections as the State commissioner of health or the commissioner of the department of water supply, gas, and electricity of the city of New York may prescribe. If any such inspection discloses a violation of any such rule or regulation relating to a temporary or permanent source or act of contamination such officer, board, or corporation shall cause a copy of the rule or regulation violated to be served upon the person violating the same, with a notice of such violation. If the person served does not immediately comply with the rule or regulation violated. such officer, board, or corporation, except in a case concerning the violation of a rule or regulation relating to a temporary or permanent source or act of contamination affecting the potable water supply of the city of New York, shall notify the State department of the violation, which shall immediately examine into such violation; and if such person is found by the State department to have actually violated such rule or regulation, the commissioner of health shall order the local board of health of such municipality wherein the violation or noncompliance occurs, to convene and enforce obedience to such rule or regulation. If the local board fails to enforce such order within 10 days after its receipt, the corporation furnishing such water supply or the municipality deriving its water supply from the waters to which such rule or regulation relates, or the State commissioner of health or the local board of health of the municipality wherein the water supply protected by these rules is used, or any person interested in the protection of the purity of the water supply, may maintain an action in a court of record which shall be tried in the county where the cause of action arose against such person, for the recovery of the penalties incurred by such violation, and for an injunction restraining him from the continued violation of such rule or regulation. If the person's erved does not comply within five days with the rule or regulation violated, in case such rule or regulation relates to a temporary or permanent source or act of contamination affecting the potable water supply of the city of New York, the commissioner of water supply, gas, and electricity of said city may summarily enforce compliance with such rule or regulation, and may summarily abate or remove the cause of the violation of such rule or regulation or the nuisance so created, and to that end may employ such force as may be necessary and proper: Provided, however, That no building or improvements shall be removed, disturbed, or destroyed by the said commissioner of water supply until he shall cause measurements to be made of the buildings and photographs of the exterior views thereof, which measurements and photographs shall be at the disposition thereafter of the owners or their attorneys, and failure to exercise such right of abatement shall not be deemed a waiver thereof. Failure to comply within five days with such rule and regulation shall further entitle the city of New York to maintain an action in any court having jurisdiction thereof for the recovery of the penalties incurred by such violation and for an injunction restraining the person or persons violating such rule or regulation, or creating or continuing such nuisance, from the continued violation of such rule or regulation or continuance of such nuisance; the remedy by abatement being not exclusive.

SEC. 73. Sewerage.—When the State department of health, or the commissioner of water supply, gas, and electricity of the city of New York, shall, for the protection of a water supply from contamination, make orders or regulations the execution of which will require or make necessary the construction and maintenance of any system of sewerage, or a change thereof, in or for any village or hamlet, whether incorporated

or unincorporated, or the execution of which will require the providing of some public means of removal or purification of sewage, the municipality or corporation owning the water works benefited thereby shall, at its own expense, construct and maintain such system of sewerage, or change thereof, and provide and maintain such means of removal and purification of sewage and such works or means of sewage disposal as shall be approved by the State department of health, and for that purpose said municipality or corporation may acquire, under the general condemnation law, the necessary real estate or interest therein whether now used for public or private purposes. When the execution of any such regulations of the State department of health, or the commissioner of water supply, gas, and electricity of the city of New York, will occasion or require the removal of any building or buildings, the municipality or corporation owning the water works benefited thereby shall, at its own expense, remove such buildings and pay to the owner thereof all damages occasioned by such removal. When the execution of any such regulation will injuriously affect any property the municipality or corporation owning the water works benefited thereby shall make just and adequate compensation for the property so taken or injured and for all injuries caused to the legitimate use or operation of such property. Until such construction or change of such system or systems of sewerage, and the providing of such means of removal or purification of sewage, and until such works or means of sewage disposal and the removal of any building are so made by the municipality or corporation owning the water works to be benefited thereby at its own expense, and until, except in the case of a municipality, the corporation owning the water works benefited shall make just and adequate payment for all injuries to property and for all injuries caused to the legitimate use or operation of such property, there shall be no action or proceeding taken by any such municipality, officer, board, person, or corporation against any person or corporation for the violation of any regulation of the State department of health under this article, and no person or corporation shall be considered to have violated or refused to obey any such rule or regulation.

The owner of any building the removal of which is occasioned or required, or which has been removed by any rule or regulation of the State department of health, or the commissioner of water supply, gas, and electricity of the city of New York, made under the provisions of this article, and all persons whose rights of property are injuriously affected by the enforcement of any such rule or regulation, shall have a cause of action against the municipality or corporation owning the waterworks benefited by the enforcement of such rule or regulation, for all damages occasioned or sustained by such removal or enforcement, including all injuries caused to the legitimate use or operation of such property, and an action therefor may be brought against such municipality or corporation in any court of record in the county in which the premises or property affected is situated and shall be tried therein; or such damages may be determined by a special proceeding in the supreme court or the county court of the county in which the property is situated. Such special proceedings shall be commenced by petition and notice to be served by such owner upon the municipality or corporation in the same manner as for the commencement of condemnation proceedings. Such municipality or corporation may make and serve an answer to such petition as in condemnation proceedings. The petition and answer shall set forth the claims of the respective parties, and the provisions of the condemnation law shall be applicable to the subsequent proceedings upon the petition and answer, if any. Either party may, before the service of the petition or answer, respectively offer to take or pay a certain sum, and no costs shall be awarded against either party unless the judgment is more unfavorable to him than his offer: Provided, however, That in the case of a summary abatement by a municipality as hereinbefore provided, no costs shall be awarded against the owner of the property damaged, and the commissioners of appraisal in their report shall recommend such additional sum as may

In their judgment be reasonable as compensation for witnesses and other necessary expenses of claimant. Such municipality shall, within three calendar months after the confirmation of the report of the commissioners of appraisal, pay to the respective owners and bodies politic or corporate, mentioned or referred to in said report, in whose favor any sum or sums of money shall be estimated and reported by said commissioners, the respective sum or sums so estimated and reported in their favor respectively, with lawful interest thereon. And in case of neglect or default in the payment of the same within the time aforesaid, the respective person or persons or bodies politic or corporate in whose favor the same shall be so reported, his, her, or their executors, administrators, or successors, at any time or times, after application first made by him, her, or them to such municipality for payment thereof, may sue for and recover the same, with lawful interest as aforesaid, and the costs of suit in any proper form of action against such municipality in any court having cognizance thereof, and it shall be sufficient to declare generally for so much money due to the plaintiff or plaintiffs therein by virtue of this act, and the report of said commissioners, with proof of the right and title of the plaintiff or plaintiffs to the sum or sums demanded shall be conclusive evidence in such suit or action,

## Sewers-Construction of systems (an act adopted Apr. 8, 1912).

Sec. 230a. Town board may direct construction of portions of sewer system; extension, notice of, petition.—If in the petition for the establishment of a sewer district, or for an extension to an existing district, the petitioners shall pray that a portion or portions only of the system designed ultimately to serve the entire district, or an extension to the said district, shall be constructed in the first instance, and shall describe the said portion or portions in their said petition, and indicate the same on the said map and plan, and shall specify the maximum amount proposed to be expended in the construction of such portion or portions of the said system, the town board may include in its order establishing the said district or extension a direction that the sawer commissioners shall construct only the portion or portions of the said system designated in the said petition until extensions thereto shall be authorized as hereinafter provided. In case the town board shall make an order establishing the said district and containing the said direction, the provisions of this chapter shall be applicable thereto in all respects, except that the town board shall not issue bonds to provide for the cost of such portion or portions to an amount exceeding the amount mentioned in the said petition as the maximum amount proposed to be expended in the construction of such portion or portions. Thereafter extensions to the said system may, from time to time, be authorized by the town board upon the petition of the owners of real property within the area in said district to be served by any proposed extension or extensions to the said system, representing more than one-half in value of the taxable real property within such area, as appears by the last preceding completed assessment roll, which said petition shall comply in form, substance, and in the manner of execution, so far as applicable thereto, with the requirements of the petition for the establishment of a sewer district, and shall state the maximum amount proposed to be expended for such extension or extensions, and shall have indersed thereon a written approval of a majority of the sewer commissioners of such district, and there shall be presented with the said petition a map prepared by a competent engineer, showing the area proposed to be served by any such proposed extension, and in case such proposed extension or extensions involve a change from the plans shown by the map and plan attached to the petition for the establishment of the said sewer district such petition shall be accompanied by a map and plan of such extension or extensions prepared in the same manner as the original map and plan, and approved by the State board of health.

Before acting upon a petition to extend the system in any district or extension thereof, the town board shall give notice of the time and place at which it will meet to act thereon, by posting at least 21 days before the day fixed for the said meeting a

notice thereof in at least four public places in the said district, and by publishing a notice thereof once in each of the three calendar weeks immediately preceding the week in which the said meeting is to be held in at least one newspaper published in the said town, if a newspaper is published therein. The cost to the petitioners of the maps, plans, specifications, and of the acknowledgments of the signatures to such petition may be made a part of the expense of constructing the said extension or extensions, as provided in section 230 of the town law with respect to the like expenditures of the original petitioners, and the maximum amount proposed to be expended in the construction of any such extension or extensions to the sewer system in any such district may be increased by the petition of the owners of real property in the area proposed to be served thereby representing more than one-half the taxable real property therein as appears by the last preceding completed assessment roll of said town, in the manner specified in section 230 of the town law for increasing the maximum amount proposed to be expended for the construction of the original system. In case said extension or extensions to the said sewer system in any such district shall be authorized by the town board of any such town, such extension or extensions shall thereafter, for all purposes, be regarded as part of the original system and shall be constructed and maintained by the sewer commissioners of the said district, and the cost of the construction thereof shall be provided for by the issue and sale of town bonds in the same manner as provided in section 237 of the town law for the payment of the cost of the original system, which said bonds shall be a town charge, and the principal and interest thereof, together with the cost of maintenance of such extension or extensions, shall be collected from the real property within the said district by the said sewer commissioners in the same manner as though said extension or extensions had formed a part of the original system constructed in the said district.

Sec. 231. Action by town board.—If the town board is satisfied that the petitioners are owners of real property in the proposed district or extension, and own more than one-half in value of the taxable real property therein, they shall make an order establishing such district, or extending the boundaries of an existing district, and if establishing a new district, appointing three taxpayers therein as sewer commissioners, who shall hold their offices at the pleasure of the town board. Such sewer commissioners shall each be paid for their services, at such times as the town board may designate in said order, an amount to be fixed by the town board, which amount shall not exceed \$3 per day for each day actually and necessarily spent in the business of the sewer district and shall be deemed an expense of maintaining the sewer system and shall be collected and paid as provided in section 243 of this chapter for expense of maintenance.

Sec. 2. This act shall not affect any proceeding now pending under any sections of the town law amended by this act and begun in conformity to the requirements thereof as they existed prior to the taking effect of this act, and such proceedings may be conducted to completion with the same force and effect as if said sections had not been hereby amended.

## Foodstuffs—Regulation of the cold storage of (regulations Issued by the Commissioner of Health, revised Mar. 15, 1912).

1. For the purpose of enforcing this act the term "cold storage" will be held to mean the storage of foods at or below a temperature of 40° Fahrenheit in establishments employing refrigerating machinery or ice.

The terms "cold-storage warehouse or refrigerating warehouse" will be held to mean an establishment employing refrigerating machinery or ice for the purpose of refrigeration, in which foods are stored at a temperature of 40° Fahrenheit or below.

2. Articles of food intended for cold storage shall, when they are offered for or placed in storage, be inclosed in boxes, barrels, crates, or other packages sufficiently

strong to protect them from injury, unless the articles are of such a character that it is impracticable to pack them in containers.

3. When articles of food contained in packages are placed in cold storage, each package shall be legibly marked in black or purple waterproof ink as follows: The name of the storage company and place in which it is located; below that the words "cold storage"; below that the word "received" followed by the day, month, and year when said articles were placed in storage.

The word "delivered" followed by the day, month, and year when such articles are taken from storage shall be stamped upon such foods or packages before being removed therefrom.

When articles of food not contained in packages are placed in cold storage, each individual article must be marked in the above manner.

All letters or figures must be in plain type not less than three-eighths of an inch in height.

The word "Received" may be written "Rec'd." and the word "Delivered" may be written "Del'd.," and figures separated by hyphens may be used to indicate dates and will be regarded as sufficient date if following the words "Rec'd." or "Del'd.," as the case may be. The last two figures of the number indicating the year when such foods were placed or taken from storage may be used, e, g., "Received September 1, 1911," may be written "Rec'd 9-1-11," or "Delivered September 1, 1911," may be written "Del'd 9-1-11."

Whenever tags are used on which to mark dates, they must be so securely fastened to the article to which they are affixed that they can not become detached.

4. Food held in receiving rooms for a period not to exceed one week must be stamped with the date of receipt and delivery and with the name and location of the storage company, but need not be marked "cold storage."

5. Articles of food held at low temperature during the process of manufacture will not be regarded as being held in cold storage within the meaning of this act, and such articles need not be dated.

6. The floors, halls, walls, ceilings, furniture, receptacles, implements, and machinery of every cold-storage or refrigerating warehouse shall be kept in a clean, healthful, and sanitary condition; and, for the purpose of this rule, unclean, unhealthful, or insanitary conditions shall be deemed to exist if the food stored is not securely protected from flies, dust, dirt, insects, and from all other foreign or injurious contamination.

7. Toilet rooms shall be separate and apart from the rooms in which food is stored. Cuspidors for the use of employees must be washed daily with disinfectant solution.

8. No employer shall knowingly require, permit, or suffer any person to work, nor shall any person work, in a cold storage or refrigerating warehouse who is affected with any infectious or contagious disease.

9. The representation of cold-storage poultry, fish, and eggs required under section 339c may be made by the retailer by placing upon such articles or upon the receptacle containing them, in full view of the public, a card not smaller than 6 inches in height by 10 inches in length, upon which shall be printed the words "cold storage" in plain letters not less than 2 inches in height.

# MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

## BELLEVUE, OHIO.

Nuisances and miscellaneous matters (regulation board of health adopted Mar. 21, 1912).

Sec. 1. No person shall heat any room, building, or other inclosure by means of a gas or oil stove or furnace or other device in which gas, oil, or coal is used as a fuel unless such stove, furnace, or other device is provided with ample means for conducting out of said room, building, or other inclosure into the open air all smoke and noxious gases or other products of combustion.

Sec. 2. It shall be the duty of the owner or owners of every tenement or lodging house to provide a suitable place or places in connection therewith for the reception of

garbage or other refuse matter.

SEC. 3. No room in any tenement or lodging house in the city shall be occupied as a sleeping room unless there are at least 400 cubic feet contents for each person therein

not less than 10 years of age.

Sec. 4. Whenever, upon examination, it shall appear to the board of health that any cellar, basement, room, tenement, or building in the city occupied as a dwelling place or place of lodging has become, by reason of the ventilation, infection from communicable disease, or other causes, unfit for such purposes, and a nuisance, and a cause of sickness to the occupants or the public, the owner, lessee, agent, or occupant will be considered as maintaining a nuisance.

SEC. 5. In all cases where a nuisance shall be found in any building or upon any ground or premises within the city, not more than five days' notice may be given in writing, signed by the health officer, to the owner or occupant of such building or other premises, to remove such nuisance, and in case of his neglect or refusal to abate the same in accordance with such notice, said health officer shall prosecute said owner

or occupant as provided by the law.

Sec. 6. No person, owner, agent, lessee, or occupant of any building, yard, or lot of ground shall allow to accumulate or remain in or on said building, yard, or lot of ground, any putrid or unsound meat, pork, fish, hides, decayed vegetables or food, man re, filthy ash heaps, garbage, offal, rubbish, dirt or filth of any kind, which by its decay

or putrefaction could or would become detrimental to health.

Sec. 7. Whenever any owner or agent of any building in the city of Bellevue, shall rent, lease, or hire out to be occupied any building or parts thereof as a home or residence of more than two families living independently of one another, or a building to different persons for stores and offices in said building, giving to each family or persons the common right to halls, yards, water-closets, or privies, or some of them, then such owner or agent shall be liable for the condition of said halls, yards, water-closets, or privies and said owner or agent may be made defendant in a prosecution for the violation of the provisions of this code.

SEC. 8. Every person owning, leasing, or occupying any stall, stable, or compartment where any horse or any cattle or mule shall be kept, and every owner of any horse, mule, or head of cattle shall maintain a durably made receptacle or bin, which if located outside the building must be so constructed and kept as to preserve the

contents at all times dry and free from rain; or other structures, as vault or cellar, in which receptacles shall be placed all manure or refuse from such horse, mule, or cattle. In no event or circumstance shall such manure or refuse be thrown or deposited in alley, street, or public place or suffered to remain therein.

Sec. 9. No person shall suffer any particular drain from any building or land of which he is the owner or occupant to leak, to be out of repair, or to remain clogged, nor shall any person suffer sewage or waste or stagnant water to remain in any building or upon any land of which he is the owner or occupant.

Sec. 10. No person shall throw into or deposit in any closet, vault, sink, privy, or

cesspool any offal, ashes, garbage, swill, or other substance.

Sec. 11. No tenant, occupant, or owner or agent of such tenant, occupant, or owner of any building or premises shall remove or permit or cause to be removed any of the contents of any privy vault therein or thereon without a permit furnished by the health officer, and then only in strict accord with the provisions of such permit.

SEC. 12. No person shall deposit any animal or vegetable substance or waste from factories, manure, or any material whatever that is putrid or offensive, or that is liable

to become so, on premises within the city.

SEC. 13. No person shall carry or convey in any vehicle any earth, sand, gravel, dirt, rubbish, ashes, manure, or any loose fluid or semifluid or offensive articles or matter of any articles whatever, so that the same shall be scattered, dropped, or spilled therefrom, and all vehicles conveying foul, dusty, or offensive matter of any sort shall have tight bodies.

SEC. 14. No person shall throw or let fall or allow or suffer to be thrown any refuse, liquid or solid, or any water that has been used, swill, garbage, rubbish, ashes, or any animal or vegetable matter, into or upon any street, alley, or public place, premises, or open lot.

SEC. 15. No person, in conducting or carrying on any business or employment within the limits of the city, shall place or permit to be placed or suffer to remain on his or their premises, any blood, bones, offal, filth, swill, slops, decayed fruits, vegetable or animal substances, or other offensive matter for a longer time than 24 hours at a time from the 1st day of March to the 1st day of November in any year nor exceeding 48 hours during any other part of the year.

Sec. 16. It shall be unlawful for the owner, agent, or occupant of any soap factory, tannery, distillery, livery stable, cattle yard or shed, barn, packing house, manufactory of fertilizer or rubber goods, slaughterhouse or rendering establishment, factory building or structure of any kind to allow the same to become nauseous, foul, or offensive.

SEC. 17. No fat, tallow, or lard shall be melted or rendered, except when fresh from the slaughtered animal, and taken direct from the place of slaughter in the city and in a condition free from sourness or taint, and all other causes of offense at the time of rendering, and all melting and rendering must be in steam-tight vessels, and the gases and odors therefrom must be destroyed by combustion or other means equally effective, and according to the best and most improved means and processes; and everything preceding, following, and in connection with such melting and rendering, and the premises where the same shall be conducted, must be free from all offensive odor and other causes of detriment to the public health. No fat, lard, or tallow shall be brought into the city to be rendered or melted and none shall be rendered that has come from any place outside the city.

Sec. 18. It shall be unlawful to steam, boil, or render any offal or impure animal grease, lard or tallow, or render any animal substance or carry on the business of bone boiling or grinding or the making of glue, rubber goods, or fertilizers, or any other business or manufacturing whereby are generated offensive odors and gases; provided, however, such occupation, business, or manufactory described may be conducted if in such a manner as to preserve the atmosphere free from offensive odors or noisome

smell, and if there be employed such methods and means as will entirely condense, decompose, deodorize, and destroy such odors and gases.

Sec. 19. No person shall burn or suffer to be burned within the city any leaves, garbage, refuse, woolen, silk, leather, or india rubber goods, or other substances so

that the same shall give rise to offensive odors or gases.

Sec. 20. No person shall use the sidewalks or the streets of the city, or the gutters between them, as a drainage to carry off any water that has been used, or other fluids, or soap suds or dye stuffs, or liquid manures, or any other liquids, whether from privies or otherwise.

Sec. 21. No person shall clean, scale, or wash any fish, meat, clothes, carriage or buggy, or anything tending to create a nuisance on any of the streets, alleys, public

grounds, or markets of the city.

Sec. 22. No person shall deposit on any street, alley, private or public place in the limits of the city, any dirt, brick, or other material in such a manner as to obstruct

the free flow of water along any gutter.

SEC. 23. No person owning, occupying, or having charge of any building, stable, or other premises shall keep or allow to be kept thereon any fowl, dog, or other animal which shall, by barking or other noise, or by offensive kennel or other place of keeping, disturb the quiet or repose, or the purity of the air in the living rooms of those thereon or in the vicinity thereof, to the detriment of the life, health, or comfort of any person or persons.

Sec. 24. No person shall water any horse or other animal that is affected with glanders, nasal catarrh, or any other disease of a contagious character, at any public-

drinking fountain or public well within the city.

All public-drinking fountains must be provided with sanitary bubbling drinking faucets, and under no circumstances will a public fountain be permitted to be maintained in service where drinking cups are used in common.

Sec. 25. No person shall keep or maintain a dairy within the city and no person shall keep more than two cows within the city limits, nor feed or milk any cow on any sidewalk within the city, nor feed any cow or swine on any streets or sidewalk or alley within the city.

Sec. 26. Any person under contract with the city or other person whose duty it is to remove dead animals from the city, shall call on the health officer once each day of the week (and on Sunday) to receive notice of the whereabouts of any such dead animals and to remove the same within one hour next after receiving such notice.

Sec. 27. It shall be unlawful to permit the contents of any vault, privy, cistern, cesspool, or sink, or any part thereof, to flow therefrom into any ground, or to rise within two feet of any part of the top thereof, or to permit the same to become offensive or detrimental to health.

Sec. 28. It shall be unlawful to throw or place the contents of any sink, cesspool, vault, or privy, or any part thereof, or any manure or refuse in any street, square, court, lane, avenue, alley, or public place, or in or upon any vacant lot or parcel of ground in said city.

Sec. 29. It shall be unlawful to suffer or permit any cellar, private drain, pool, sewer, or sink upon any premises in said city to become nauseous, foul, offensive, or

injurious to the public health.

Sec. 30. It shall be unlawful to suffer any building or grounds to remain for a period of twenty-four consecutive hours in such condition as to be offensive, dangerous, or prejudicial to the health or safety of the occupants or other persons.

Sec. 31. It shall be unlawful to use for domestic purposes, or for the purpose of watering any animal or animals, the water of any well that has been examined and

found in a condition unfit for use.

Sec. 32. It shall be unlawful for any person to use any lot or parcel of land for the purpose of throwing or dumping thereon any ashes, garbage, night soil, filth, or any noisome or deleterious substances, unless authorized so to do by the board of health.

### BROCKTON, MASS.

Ice Cream—Production, care, and sale (regulation board of health adopted Aug. 1, 1912).

#### ARTICLE I.

Sec. 1. No ice cream shall be manufactured or stored in any portion of a building which is used for the stabling of horses or other animals, or in any room used in whole or in part for domestic or sleeping purposes, unless the manufacturing and storage room for ice cream is separated from other parts of the building, to the satisfaction of the board of health.

Sec. 2. All rooms in which ice cream is manufactured or stored shall be provided with tight walls and floors, window and door screens, and kept constantly clean. The walls and floors of said rooms shall be of such construction as to permit rapid and thorough cleansing. The room or rooms aforesaid shall be equipped with appliances for washing or sterilizing all utensils employed in the mixing, freezing, storage, sale, or distribution of ice cream, and all such utensils after use shall be thoroughly washed with boiling water, or sterilized by steam. Vessels used in the manufacture and sale of ice cream shall not be employed as containers for other substances than ice cream.

SEC. 3. All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of operatives, and all persons, immediately before engaging in the mixing of the ingredients entering into the composition of ice cream, or its subsequent freezing and handling, shall thoroughly wash his or her hands and keep them cleanly during such manufacture and handling. All persons shall be dressed in clean outer garments while engaged in the manufacture and handling of ice cream.

Sec. 4. No urinal, water-closet, or privy shall be located in the rooms mentioned in the preceding section, or so situated as to pollute the atmosphere of said rooms.

Sec. 5.—All vehicles used in the conveyance of ice cream for sale or distribution shall be kept in a cleanly condition and free from offensive odors.

## ARTICLE II.

Sec. 1. Ice cream kept for sale in any shop, restaurant, or other establishment, shall be stored in a covered box or refrigerator. Such box or refrigerator shall be properly drained and cared for, and shall be kept tightly closed, except during such intervals as are necessary for the introduction or removal of ice cream or ice, and they shall be kept only in such locations and under such conditions as shall be approved by the board of health.

#### ARTICLE III.

Sec. 1. Every person engaged in the manufacture, storage, transportation, sale, or distribution of ice cream, immediately on the occurrence of any case or cases of infectious disease, either in himself or in his family, or amongst his employees, or within the building or premises where ice cream is manufactured, stored, sold, or distributed, shall notify the Brockton Board of Health, and at the same time shall suspend the sale and distribution of ice cream until authorized to resume the same by the said board of health. No vessels which have been handled by persons suffering from such disease shall be used to hold or convey ice cream until they have been thoroughly sterilized.

## ARTICLE IV.

Sec. 1. All cream, milk, or skimmed milk employed in the manufacture of ice cream shall, before use, be kept at a temperature not higher than 50° Fahrenheit.

Sec. 2. No person, by himself or by his servant or agent, or as the servant or agent of any other person, firm, or corporation, shall, in the city of Brockton, sell, exchange,

or deliver any ice cream which contains more than 500,000 bacteria per cubic centimeter.

Sec. 3. No old or melted ice cream, or ice cream returned to a manufacturer from whatever cause, shall again be used in the preparation of ice cream.

### CHATTANOOGA, TENN.

## Manure-Receptacles and transportation (ordinance adopted Apr. 22, 1912).

SEC. 1. It shall be the duty of every person owning, controlling, operating, or having in charge any stable, barn, or other place where horses, mules, cows, or other live stock is kept, to have and maintain at all times upon the premises in or adjacent to said stable, barn, or place, a fly-tight receptacle of sufficient dimensions and for the purpose of containing the droppings of manure from said stock, and the same shall have a top or lid so arranged as to be fly-tight and to exclude therefrom all flies, and therein to promptly deposit all droppings from said stock, and to keep the lid thereon (except when necessarily open for the purpose of depositing therein or removing therefrom) closed in such manner as to prevent the ingress of flies thereto. And every person, company, or corporation having or keeping such manure in the city shall cause the same to be removed from the premises at least once every week. No person shall remove or transport any such manure over any public highway in the city except in a tight vehicle, which, if not inclosed, must be effectually covered with canvas or other suitable material, so as to prevent the manure from falling therefrom.

SEC. 2. Any person violating or failing to comply with the provisions of this ordinance shall be guilty of misdemeanor and shall be fined not less than \$5 nor more than \$50 for each offense, and each separate day upon which the offense is committed shall

be deemed a separate offense within the purview of this ordinance.

SEC. 3. It shall be the duty of the health officer of the city of Chattanooga and of all police officers and others vested with police powers to see to the enforcement of this ordinance and to arrest or cause the arrest of offenders against the same.

Sec. 4. This ordinance shall take effect and be in force two weeks from and after its passage.

#### CHELSEA, MASS.

### Foodstuffs—Care and sale (rule board of health adopted July 2, 1912).

Rule 130.—Sec. 2. Whereas the exposure of foodstuffs to the street, dust, insects, and animals is liable to infect and corrupt such foodstuffs, it is hereby ordered that meat, poultry, game, fish, sea food, dried or preserved fruits, dates, figs, cherries, grapes, and berries (except at wholesale in the original crates), cut fruits, cut melons, cracked nuts or nut meats, candies, confectionery or bakers' products which are intended for sale for human food, shall not be conveyed, except during the loading or unloading of vehicles, from place to place or kept in an open doorway or in or near an open window unless the window is protected with a screen having a mest of not less than 40 per inch, outside of a building or in public or private way of the city of Chelsea, unless so covered with clean material or so placed as to be protected from dust, flies, or other insects, animals, and all other contaminating influences.

SEC. 3. Every person being the occupant or lessee of any room or stall, building, or other place, and every person being the owner or person in charge of any stand, case, rack, bench, pushcart, or other vehicle, where or from which human food is kept, stored, sold, or offered for sale, shall maintain such room, stall, building or other place, stand, case, rack, bench, pushcart, or other vehicle and its appurtenances in a clean and wholesome condition.

Sec. 4. All persons while engaged in the handling of articles of food in such room, stall, building, or other place, shall wear clean outer garments, and shall be free from contagious or infectious disease.

Sec. 5. No room in which articles of food are prepared, kept, stored, sold, or offered for sale, shall be used for domestic purposes or open directly into any room so used. In no such room shall there be any water closet. All shops or stores used for the sale of articles of food shall be supplied with proper lavatory accommodations.

Sec. 6. The wrapping of meats, fish, breadstuffs, dairy products, vegetables, etc., destined for sale or delivery for food purposes, in newspapers or other unclean materi-

als, is hereby prohibited.

Sec. 7. Every peddler of foodstuffs, from wagons or carts, in addition to the clean covering provided for in this regulation, shall keep in his wagon or cart a water-tight and sufficient receptacle for the wastes of his business, and such wastes shall be so disposed of as not to cause a nuisance.

Sec. 8. All fruit, vegetables, or other articles of food exposed for sale, shall be kept at a height of not less than 18 inches from sidewalk or ground above which they are

placed.

#### CHICAGO, ILL.

## Penalty for violation of Chapter XXXVIII of the Chicago Code of 1911 (ordinance adopted Nov. 25, 1912).

SECTION 1. That section 1493 of Article XXXII of Chapter XXXVIII of the Chicago Code of 1911 be amended by striking out said section and substituting in lieu thereof the following words and figures:

"1493. General penalty.—Any person, firm, or corporation who violates, disobeys, omits, neglects, or refuses to comply with, or who resists the enforcement of, any of the provisions of this article or this chapter, where no other penalty is specifically provided, or who violates, disobeys, omits, neglects, or refuses to comply with any rule or regulation made by the commissioner of health in pursuance of the authority contained in section 1164 of the Chicago Code of 1911, provided that said rule or regulation has been approved by the city council and published as provided by law, or who resists the commissioner of health or his duly authorized agent in the enforcement of the provisions of any section or article of this chapter, shall be fined not less than \$10 nor more than \$200 for each offense."

This ordinance shall be in force and effect from and after its passage, approval, and due publication.

## BERKELEY, CAL.

## Privies, temporary—Construction and maintenance (ordinance adopted June 11, 1912).

SEC. 1. Every person, firm, or corporation while engaged in the construction, repair, removal, or destruction of any building or buildings, or upon any work on the public streets in the city of Berkeley, shall be required to provide and maintain a privy or toilet accommodations for employees thereon, in accordance with the following conditions and requirements:

(a) If the total cost of such building or the contract price of the work as shown by the application for a building permit shall amount to the sum of \$2,500, or over, the privy or toilet shall be connected with a sewer and shall be constructed in all respects

according to the provisions of Ordinance No. 92-N. S. applicable thereto.

(b) If the total cost of such building or the contract price of the work shall be less than the sum of \$2,500, the privy or toilet shall either be connected with a sewer, as hereinbefore provided, or shall be constructed with tight walls and floor and all ventilation openings must be screened with 15-mesh wire screening and the door must be closed by means of a spring. The receptacle for excreta must be an excavation in the earth at least 2 feet by 3 feet and 4 feet in depth. All excrements shall be covered with earth daily and upon completion of the work the excavation shall be entirely filled with earth.

SEC. 2. Any person, firm, or corporation performing any work on the public streets of the city of Berkeley shall maintain a privy over a manhole to a public sewer nearest the location of said work, said privy to be immediately removed upon the completion of said work.

Sec. 3. Any person, firm, or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not exceeding \$300, or by imprisonment not exceeding 60 days, or by both such fine and imprisonment.

Sec. 4. This ordinance shall take effect and be in force from and after 30 days after its final passage.

#### CUMBERLAND, MD.

## Garbage and refuse-Collection and removal (ordinance adopted June 10, 1912).

SEC. 1. Be it ordained by the Mayor and City Council of Cumberland, That there be added to Chapter XII of the City Code of 1902, title "Health," a section to be designated as section 4E, under the subtitle "Offensive matter," to read as follows:

Sec. 4E. All garbage and refuse from kitchens, stores, and restaurants, placed for collection by the collector of garbage, must be placed in metal receptacles having strong close-fitting tops of the same material as that composing the receptacle, each receptacle to be of a size to hold not more than one bushel.

Restaurants, lunch rooms, hotels, and similar places shall provide suitable containers or garbage receptacles for the reception of garbage, made from nonabsorbent material to be tightly and securely covered at all times and to be removed or emptied whenever full, not less than twice a week during June to October and not less than once a week during October to May.

No garbage shall be placed upon the curb line of any street nor shall any garbage can be placed in front of any building for collection of its contents earlier than three hours before the scheduled time for such collection nor be permitted to remain in front of any building more than one hour after said time scheduled for collection.

Any person violating the provisions of this section shall be subject to a fine of \$2 for each offense.

SEC. 2. And be it further ordained that this ordinance shall take effect from the 17th day of June, 1912.

## LOS ANGELES, CAL.

#### Laundries and washhouses (ordinance adopted May 1, 1912).

SEC. 35. It shall be unlawful for any person, firm, or corporation to construct, establish, conduct, operate, or maintain, or to cause or permit to be constructed, established, conducted, operated, or maintained any public washhouse or laundry unless the same is connected with an accepted public sewer, or unless every wash-room floor therein is constructed of cement.

Sec. 36. It shall be unlawful for any person, firm, or corporation conducting, operating, managing, or carrying on a public washhouse or laundry to permit any person suffering from any infectious or contagious disease to lodge, sleep, or remain within or upon the premises used for the purpose of such public washhouse or laundry.

SEC. 37. It shall be unlawful for any person to spray any clothing or other articles in any public laundry by means of water or other liquid substance ejected from the mouth. A public laundry, within the meaning of this section, is any place where clothing or other articles are washed or ironed for compensation.

### WASHINGTON, D. C.

Drains and sewers—Leaks and obstructions in (ordinance adopted June 11, 1912).

That section 10 of an ordinance to revise, consolidate, and amend the ordinances of the board of health, etc., legalized by joint resolution of Congress, approved April 24, 1880, and again by the act of Congress approved August 7, 1894, and under authority of the act of Congress approved February 28, 1899, is hereby amended as follows:

By striking out section 10 and inserting in lieu thereof the following:

"Sec. 10. Neither the owner nor occupant of any lot, building, or other structure in the District of Columbia, shall allow any drain pipe, soil pipe, fixture, or passage of any description, for the drainage of said lot, building, or structure, or of any part thereof, into any public sewer or into any sewage disposal system, public or private, to leak and to permit the escape of its contents or any part thereof elsewhere than into the public sewer or into the sewage disposal system with which said drain pipe, soil pipe, fixture, or passage is connected. Any person violating any of the provisions of this section shall, upon conviction thereof, be punished by a fine of not more than \$40 for each offense.

"Sec. 10a. Neither the owner nor occupant of any lot, building, or other structure, in the District of Columbia, shall permit any drain pipe, soil pipe, fixture, or passage of any description for the drainage of said lot, building, or structure, or of any part thereof, into the public sewer or into any sewage disposal system, public or private, to become obstructed or to remain obstructed, so as to prevent the free passage of all drainage entering it into the public sewer or into the sewage disposal system with which said drain pipe, soil pipe, fixture, or passage is connected. Any person violating any of the provisions of this section shall, upon conviction thereof, be punished by a fine of not more than \$40 for each offense.